Honeywell

HDZ Series

Analogue PTZ Dome

HDZ30A **HDZ30AX**
HDZ36AE **HDZ36AEX**

User Manual

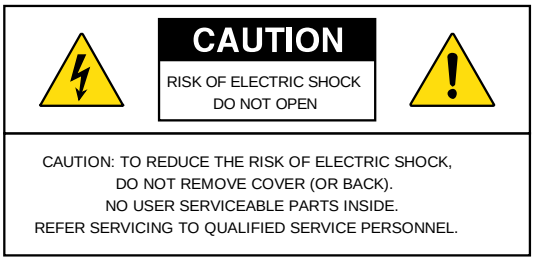
Recommended Find the latest version of this and other HDZ Series PTZ dome camera documents on the Honeywell Video website. Go to http://www.honeywellvideo.com/products/cameras/pt/index.html to find your camera and view/download the latest documentation.

Document 800-16526 – Rev A – 07/2014

Revisions

Issue	Date	Revisions
A	07/2014	New document.

Cautions and Warnings


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

WARNING **Installation and servicing should be performed only by qualified and experienced technicians to conform to all local codes and to maintain your warranty.**

WARNING **To ensure compliance with electrical safety standards, CSA Certified/UL Listed Class 2 power adapters are required.**

Regulatory Statements

FCC Compliance Statement

Information to the User: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Note Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Canadian Compliance Statement

This Class A digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la Classe A est conforme à la norme NMB-003 du Canada.

Manufacturer's Declaration of Conformance

The manufacturer declares that the equipment supplied with this guide is compliant with the European Parliament and Council Directive on the Restrictions of the use of certain Hazardous Substances in electrical and electronic equipment (2011/65/EU), General Product Safety Directive (2001/95/EC) and the essential requirements of the EMC Directive (2004/108/EC), conforming to the requirements of standards EN 55022 for emissions, EN 50130-4 for immunity, and EN 60950-1 for electrical equipment safety.

WARNING This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

WARNING To comply with EN50130-4 requirements, a UPS should be employed when powering the camera from 24 V AC.

Waste Electrical and Electronic Equipment (WEEE)

Correct Disposal of this Product (applicable in the European Union and other European countries with separate collection systems).

This product should be disposed of, at the end of its useful life, as per applicable local laws, regulations, and procedures.

Safety Instructions

Before installing or operating the unit, read and follow all instructions. After installation, retain the safety and operating instructions for future reference.

1. **HEED WARNINGS** - Adhere to all warnings on the unit and in the operating instructions.
2. **INSTALLATION**
   - Install in accordance with the manufacturer's instructions.
   - Installation and servicing should be performed only by qualified and experienced technicians to conform to all local codes and to maintain your warranty.
   - Do not install indoor-rated models in outdoor locations.
   - Any wall or ceiling mounting of the product should follow the manufacturer's instructions and use a mounting kit approved or recommended by the manufacturer.

3. **POWER SOURCES** - This product should be operated only from the type of power source indicated on the marking label.
4. **HEAT** - Situate away from items that produce heat or are heat sources such as radiators, heat registers, stoves, or other products (including amplifiers).
5. **MOUNTING SYSTEM** - Use only with a mounting system recommended by the manufacturer, or sold with the product.
6. **ATTACHMENTS** - Do not use attachments not recommended by the product manufacturer as they may result in the risk of fire, electric shock, or injury to persons.
7. **ACCESSORIES** - Only use accessories specified by the manufacturer.
8. **CLEANING** - Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
9. **SERVICING** - Do not attempt to service this unit yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
10. **REPLACEMENT PARTS** - When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards. Using replacement parts or accessories other than the original manufacturers may invalidate the warranty.

CAUTION **Risk of explosion if Battery is replaced by an incorrect type. Dispose of used batteries in accordance with local laws.**

Warranty and Service

Subject to the terms and conditions listed on the Product warranty, during the warranty period Honeywell will repair or replace, at its sole option, free of charge, any defective products returned prepaid.

In the event you have a problem with any Honeywell product, please call Customer Service at 1.800.323.4576 for assistance or to request a **Return Merchandise Authorization (RMA)** number.

Be sure to have the model number, serial number, and the nature of the problem available for the technical service representative.

Prior authorization must be obtained for all returns, exchanges, or credits. **Items shipped to Honeywell without a clearly identified Return Merchandise Authorization (RMA) number may be refused.**

Contents

About This Document **15**
Overview of Contents 15
Related Documents 16
Typographical Conventions 16
1 Introduction **17**
Overview 17
Dimensions 18
Upgrading Analogue PTZ Dome Firmware 19
2 Installing the Camera **21**
Before You Begin 21
Accessories You Can Order Separately 22
Installation Overview 22
Assembling the Camera 23
System Configuration 24
Dip Switches and Cable Connections 25
Setting Dip Switches 26
ID Setting 26
Camera Control Protocol Setting 27
Connecting RS485 28
Connecting Video 28
Connecting Power 29
Connecting Alarm Inputs/Outputs 29
Mounting the Camera 30
Using Safety Cable During Installation 31
Installing a Ceiling Mount (Indoor Only) 32
Installing a Wall Mount 33
Installing a Parapet/Flat Roof Mount 34
3 Understanding the OSD **35**
Pre-Configuration Checklist 35
Preparing to Configure the Dome 35
Accessing the Main Menu 36
Using the OSD Password to Login 36
Navigating OSD Menus 37
On-Screen Display Overview 37
OSD Menu Tree 39
OSD Menu Structure 42
Basic Keyboard Controls 48
Sending the Dome to a Preset 48
Special Presets 48
Upgrading Analogue PTZ Firmware 49
4 Operation and Configuration **51**
Main Menu Page 1 Settings 51

Setting the Language . . . 52
Setting the Default Camera . . . 52
Setting the Backlight Compensation . . . 52
Setting the Focus Mode and Options . . . 52
Auto Focus . . . 52
Manual Focus . . . 53
Setting the Auto Exposure Mode Options . . . 53
Setting the Exposure Compensation . . . 53
Setting the Auto Exposure Mode . . . 53
Exiting AE Mode Sub Menu . . . 54
Setting the WBC Mode . . . 54
Setting Auto WBC . . . 55
Setting Indoor WBC . . . 55
Setting Outdoor WBC . . . 55
Setting ATW (Auto Tracing White Balance) . . . 55
Setting Manual WBC . . . 55
Setup Menu Page 1 Settings . . . 56
Setting the Zoom Speed . . . 56
Setting the Digital Zoom . . . 56
Setting the Slow Shutter . . . 57
Setting the Digital Noise Reduction . . . 57
Enabling the Image Inverse . . . 57
Enabling the Freeze Option . . . 58
Setting the Sharpness . . . 58
Enabling the Image Stabilizer . . . 58
Exiting the Setup Menu 1 . . . 58
Setup Menu Page 2 Settings . . . 59
Enabling the Image Flip Option . . . 59
IMAGE (Digital Flip) . . . 59
M.E. (Mechanical Flip) . . . 60
OFF (No Image Flip) . . . 60
Setting the Angle Adjuster . . . 60
Setting the PT Position . . . 60
Setting PT Display . . . 61
Setting Pan to Zero . . . 61
Exiting the PT Position Menu . . . 61
Setting the Speed By Zoom . . . 61
Setting the Auto Calibration . . . 61
Setting the Password . . . 61
Using the OSD Password to Login . . . 62
Setting the OSD to Close Automatically . . . 63
Resetting the System . . . 63
System Reset . . . 63
Default System . . . 63
Setting the Maximum Pan Speed . . . 63
Exiting the Setup Menu 2 . . . 63
Main Menu Page 2 Settings . . . 63
Setting the ID Display . . . 64
Setting Up the Zone Title Display . . . 64
Enabling the Title Display . . . 64
Entering a Zone Title Name . . . 64
Setting Up a Preset Position . . . 65
Programming a Preset . . . 65
Running a Programmed Preset . . . 66
Naming a Preset . . . 66
Deleting a Preset Title . . . 67
Exiting the Preset Menu . . . 67

Setting Up a Preset Tour . . . 67
Selecting the Preset Tour Number . . . 67
Selecting a Preset Number . . . 67
Setting the Preset Position . . . 68
Setting the Preset Tour Speed . . . 68
Setting the Preset Tour Dwell Time . . . 68
Running a Preset Tour . . . 68
Deleting a Preset Tour . . . 69
Exiting the Preset Tour Menu . . . 69
Setting Up an Autopan Path . . . 69
Selecting an Autopan Line . . . 69
Setting the Autopan Start and End Points . . . 69
Setting the Autopan Direction . . . 70
Setting the Autopan Speed . . . 70
Running an Autopan Path . . . 70
Deleting an Autopan Path . . . 70
Exiting the Autopan Menu . . . 71
Setting Up a Mimic Tour . . . 71
Selecting a Mimic Tour . . . 71
Recording a Mimic Tour . . . 71
Running a Mimic Tour . . . 72
Deleting a Mimic Tour . . . 72
Exiting the Mimic Tour Menu . . . 72
Configuring the Home Setting . . . 72
Enabling the Home Function . . . 73
Selecting the Home Setting Mode . . . 73
Setting the Return Time . . . 74
Executing Home Function (GO) . . . 74
Exiting the Home Menu . . . 74
Main Menu Page 3 Settings . . . 74
Setting the IR Function (Removable IR Cut Filter) . . . 74
Setting Auto IR Function . . . 75
Setting Manual IR Function . . . 75
Configuring the Alarm Setting . . . 75
Selecting an Alarm Pin . . . 75
Enabling/Disabling the Alarm Switch . . . 76
Setting the Alarm Type . . . 76
Selecting the Alarm Action . . . 76
Setting the Dwell Time . . . 77
Setting the Alarm Priority . . . 77
Configuring the Alarm Output . . . 78
Exiting the Alarm Setting Menu . . . 78
Setting the Motion Detect Function . . . 78
Setting the Detect Switch . . . 78
Setting the Detect Mode . . . 78
Setting the Block Mode . . . 78
Setting the Motion Frame . . . 79
Disabling a Frame . . . 80
Setting the Threshold . . . 80
Exiting the Alarm Detect Menu . . . 80
Setting the WDR Function . . . 80
Enabling WDR . . . 80
Disabling WDR . . . 81
Setting Up Privacy Masks . . . 81
Enabling Privacy Masks . . . 81
Setting the Privacy Mask Transparency . . . 81
Setting the Privacy Mask Color . . . 81

Setting Up the Mask . . . 82
Clearing a Mask . . . 82
Exiting the Privacy Mask Menu . . . 83
Setting Up the Time . . . 83
Enabling the Time Display . . . 83
Setting the Year / Month / Day . . . 83
Setting the Hour / Minute . . . 83
Exiting the Time Setting Menu . . . 83
Setting Up Schedules . . . 83
Enabling/Disabling Schedules . . . 84
Setting Schedule Points . . . 84
Setting the Hour / Minute of a Schedule Point . . . 84
Setting the Mode of a Schedule Point . . . 84
Reseting a Schedule . . . 85
Exiting the Schedule Menu . . . 85
Exiting the On-Screen Display . . . 85
Appendix A HDZ Camera Specifications . . . 87
Appendix B Troubleshooting . . . 93
Technical Support . . . 93
Problem: Lens Out of Optical Focus . . . 93
Problem: Communication Between Dome and Keyboard . . . 94
Recommended WDR and DNR Settings By Scene Type . . . 94
Appendix C ID Settings . . . 97
Appendix D In-Ceiling Bracket Installation . . . 105
Package Contents . . . 106
Recommended . . . 106
Installing the In-Ceiling Bracket . . . 106
Index . . . 109

Figures

Figure 1-1 Indoor PTZ Dome Camera Dimensions . . . 18
Figure 1-2 Outdoor PTZ Dome Camera Dimensions . . . 19
Figure 2-1 HDZ Series System Configuration . . . 24
Figure 2-2 Camera Back Plate Layout . . . 25
Figure 2-3 Dip Switch ON/OFF Positions . . . 26
Figure 2-4 ID Setting Dip Switches . . . 26
Figure 2-5 Camera Control Protocol Dip Switch Settings . . . 27
Figure 2-6 RS485 Connector . . . 28
Figure 2-7 Main Power Adapter Input (Detail) . . . 29
Figure 2-8 Main Alarm Adapter Input (Detail) . . . 29
Figure 2-9 Eyelet on Camera to Secure by Lanyard During Setup . . . 31
Figure 2-10 HDCM1 Ceiling Mount Installation . . . 32
Figure 2-11 HDXWM2 Wall Mount Installation . . . 33
Figure 2-12 HDPRM2 Parapet/Flat Roof Mount Installation . . . 34
Figure 3-1 Main Menu Screen . . . 36
Figure 3-2 Enter Password Screen . . . 36
Figure 3-3 OSD Display Elements . . . 38
Figure 3-4 Main Page 1 OSD Menus . . . 39
Figure 3-5 Main Page 2 OSD Menus . . . 40
Figure 3-6 Main Page 3 OSD Menus . . . 41
Figure 4-1 Main Menu Page 1 . . . 51
Figure 4-2 Auto Focus Mode . . . 52
Figure 4-3 Auto Exposure Mode Menu . . . 54
Figure 4-4 Manual WBC Mode . . . 55
Figure 4-5 Setup Menu Page 1 . . . 56
Figure 4-6 D.N.R. Submenu . . . 57
Figure 4-7 Image Inverse Examples . . . 58
Figure 4-8 Setup Menu Page 2 . . . 59
Figure 4-9 Flip Setting Options . . . 59
Figure 4-10 Angle Adjuster Options . . . 60
Figure 4-11 PT Position Options . . . 61
Figure 4-12 Password Sub Menu . . . 62
Figure 4-13 Enter Password Screen . . . 62
Figure 4-14 Main Menu Page 2 . . . 64
Figure 4-15 Camera Title Editing . . . 65

Figure 4-16 Preset Menu 65
Figure 4-17 Preset Title Editing 66
Figure 4-18 Preset Tour Menu 67
Figure 4-19 Autopan Menu 69
Figure 4-20 Pan Direction in Relation to Dome Movement 70
Figure 4-21 Mimic Tour Menu 71
Figure 4-22 Home Setting Menu 72
Figure 4-23 Main Menu Page 3 74
Figure 4-24 Alarm Setting Menu 75
Figure 4-25 Examples of Alarm Types 76
Figure 4-26 Alarm Detect Menu 78
Figure 4-27 Frame Set Menu 79
Figure 4-28 Privacy Mask Menu 81
Figure 4-29 Set Mask Menu 82
Figure 4-30 Time Setting Menu 83
Figure 4-31 Schedule Menu 84
Figure D-1 In-Ceiling Bracket Dimensions 105

Tables

Table 2-1 Orderable Accessories . . . 22
Table 2-2 Camera Back Plate Connectors, Switches, and Buttons . . . 25
Table 2-3 ID Switch Settings . . . 26
Table 2-4 Camera Control Protocol Switch Settings . . . 27
Table 2-5 RS485 Pin Definitions . . . 28
Table 2-6 Power Input Pin Definitions . . . 29
Table 2-7 Alarm Input Pin Definitions . . . 30
Table 2-8 Honeywell Mounts and Adapters . . . 30
Table 3-1 OSD Item Descriptions . . . 38
Table 3-2 OSD Menu Structure . . . 42
Table 3-3 Special Presets . . . 48
Table 4-1 Color Temperatures by Light Source . . . 54
Table A-1 HDZ30A(X) Series Camera Specifications . . . 87
Table A-2 HDZ36AE(X) Series Camera Specifications . . . 89
Table B-1 Recommended WDR and DNR Settings by Scene Type . . . 94
Table C-1 ID Switch Settings . . . 97

About This Document

This document provides instructions for installing, configuring, and operating the HDZ Series Analogue PTZ dome camera. This document is intended for system installers, administrators, and operators.

Overview of Contents

This document contains the following chapters and appendixes:

- *Chapter 1, Introduction*, provides an overview of the main features of the HDZ Series Analogue PTZ dome camera and lists the dimensions of the indoor and outdoor models.
- *Chapter 2, Installing the Camera*, describes how to assemble, connect, and mount the camera.
- *Chapter 3, Understanding the OSD*, gives an overview of the HDZ Series Analogue PTZ dome camera on screen display, including controls and menu structure.
- *Chapter 4, Operation and Configuration*, provides setup and configuration information for the HDZ Series camera.
- *Appendix A, HDZ Camera Specifications*, lists the specifications of the HDZ Series Analogue PTZ dome cameras.
- *Appendix B, Troubleshooting*, offers possible solutions to some common issues that can occur when installing or configuring the Analogue PTZ Dome.
- *Appendix C, ID Settings*, provides a complete list of ID settings that can be set for the HDZ Series Analogue Dome (for systems with numerous Analogue PTZ Domes).
- *Appendix D, In-Ceiling Bracket Installation*, describes the in-ceiling installation procedure.
- *Index* provides a searchable list of key terms.

Related Documents

For more information relating to topics covered in this guide, see the following documents:

Document Title	Part Number
In-Ceiling Bracket Quick Installation Guide	800-12513
HDCM1 Ceiling Mount Installation Guide	900.0869
HDXWM2 Wall Mount Installation Guide	800-04516
HDPRM2 Parapet Mount Installation Guide	900.0877

Typographical Conventions

This document uses the following typographical conventions:

Font	What it represents	Example
Helvetica Narrow	Keys on the keyboard	Press Ctrl+C
`Lucida`	Values of editable fields that are mentioned in the body text of the document for reference purposes, but do not need to be entered as part of a procedure	The **Time from** field can be set to `Hours:Minute:Seconds`.
	Text strings displayed on the screen	The message `Unauthorized` displays.
Swiss721 BT Bold	Words or characters that you must type. The word “enter” is used if you must type text and then press the Enter or Return key.	Enter the **password**.
	Menu titles and other items you select	Double-click **Open** from the **File** menu.
	Buttons you click to perform actions	Click **Exit** to close the program.
Italic	Placeholders: words that vary depending on the situation	Enter your *user name*.
	Cross-reference to external source	Refer to the *System Administrator Guide*.
	Cross-reference within document	See *Chapter 2, Installation*.

1

Introduction

This chapter includes:

- *Overview, page 17*
- *Dimensions, page 18*

Overview

The Honeywell HDZ Series True Day/Night Analogue PTZ dome camera is a high resolution PTZ series camera designed for use in a wide range of video surveillance applications. This guide is intended for use with the following HDZ Series cameras:

- **HDZ30A(X)**: HDZ Series Indoor Analogue PTZ dome, 30x zoom, NTSC/PAL.
- **HDZ36AE(X)**: HDZ Series Outdoor Analogue PTZ dome, 36x zoom, NTSC/PAL.

Features of the HDZ Series Analogue PTZ dome camera include:

- Progressive image sensor: 1/4" Sony CCD
- Varifocal auto iris lens:
  - HDZ30A(X): 3.4–102 mm lens
  - HDZ36AE(X): 3.4–122.4 mm lens
- Optical zoom:
  - HDZ30A(X): 30x optical zoom
  - HDZ36AE(X): 36x optical zoom
- Preset position / preset tour / auto-pan / mimic tour
- Auto calibration
- Preset accuracy of 0.225°
- Preset speed up to 400°/s
- Proportional pan and tilt speed
- Multi-language OSD
- Multiple built-in protocols
- True Day/Night with removable IR cut filter (ICR). Minimum illumination 0.005 lux BW.

- Wide dynamic range (WDR)
- Digital noise reduction (2DNR/3DNR)
- Image inverse
- Backlight compensation
- Motion detection
- Up to 20 privacy masking zones (with motion detection OFF) or up to 16 privacy masking zones (with motion detection ON)
- 4 alarm inputs, 2 alarm outputs
- Electronic image stabilizer
- Auto exposure
- Digital slow shutter
- Electronic shutter

Dimensions

The indoor and outdoor HDZ Series cameras have the following dimensions:

Figure 1-1 Indoor PTZ Dome Camera Dimensions

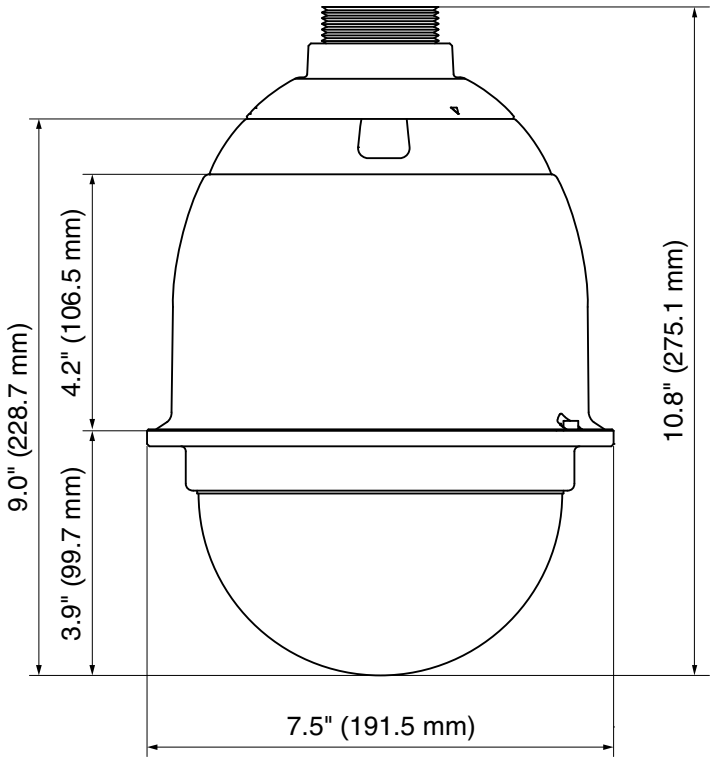
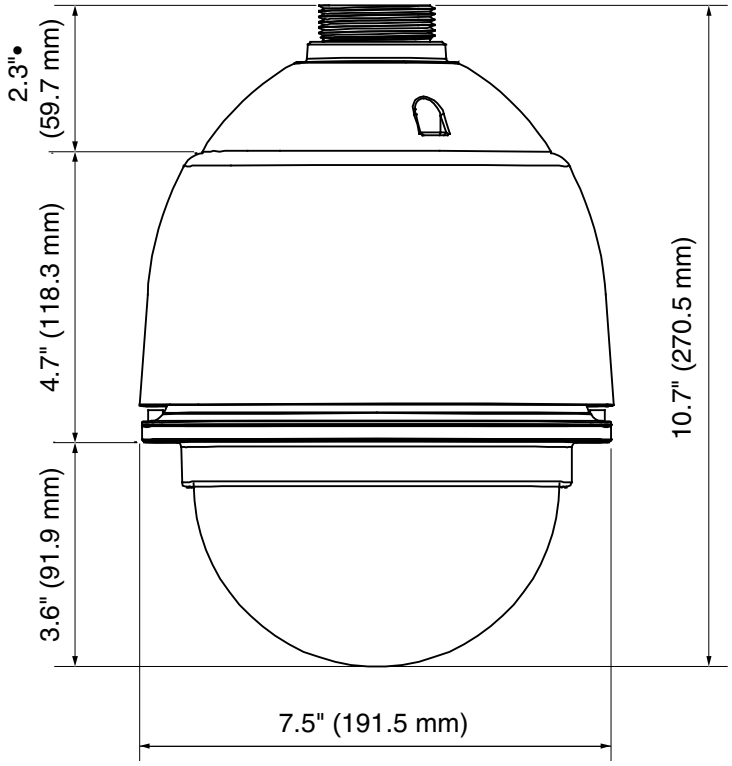


Figure 1-2 Outdoor PTZ Dome Camera Dimensions



See *Appendix D, In-Ceiling Bracket Installation* for the image and dimensions of the In-ceiling mounting bracket.

Upgrading Analogue PTZ Dome Firmware

Upgrading the firmware on the HDZ Series Analogue PTZ Dome is typically a complicated procedure. If a firmware upgrade for your camera at a site is needed, contact Honeywell technical support at **1.800.323.4576** (North America only). Refer to the back cover of this manual for international contact information.

2

Installing the Camera

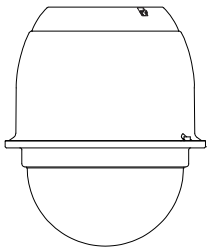
This chapter includes:

- *Before You Begin, page 21*
- *System Configuration, page 24*
- *Mounting the Camera, page 30*
- *Assembling the Camera, page 23*
- *Dip Switches and Cable Connections, page 25*

Before You Begin

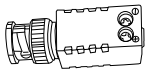
Before you begin, check that you have received all of the parts listed below. If any parts are missing or damaged, contact your dealer immediately.

HDZ Series Indoor Dome

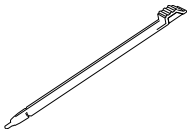


PTZ Indoor dome camera and optical cover

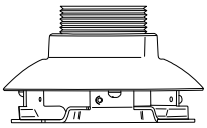
Lubricant



UTP Balun accessory



DIP Switch tool



Indoor mounting kit (top cap)

Torx screwdriver

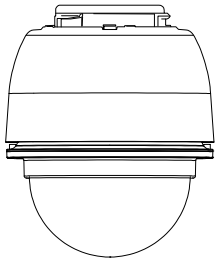
Honeywell logo label

Quick Installation Guide

M4 standard screws (x4)

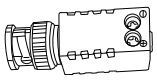
Installation CD

HDZ Series Outdoor Dome

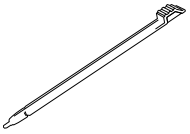


PTZ Outdoor dome camera and optical cover

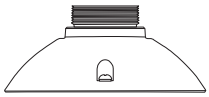
Lubricant



UTP Balun accessory



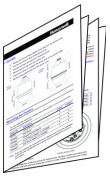
DIP Switch tool



Outdoor mounting kit (top cap)

Torx screwdriver

Honeywell logo label



Quick Installation Guide

M3 and M5 standard and security screws (1 each)

Installation CD

Accessories You Can Order Separately

There are a few accessories for your HDZ Series PTZ camera that can be ordered separately (see *Table 2-1*).

Table 2-1 Orderable Accessories

Model Number	
HDZVRSMKAC	Smoked PC vandal proof acrylic dome cover for the HDZ series.
HDZVRCLRAC	Clear PC vandal proof acrylic dome cover for the HDZ series. **Note** This part is for repair purposes only.
517082-7130	In-Ceiling PTZ support plate (for use with HDZINBKT in-ceiling mount).

Installation Overview

Follow these general steps for installing the HDZ Series Analogue PTZ camera:

1. Choose an installation location. Ensure the mounting surface can support the combined weight of the camera and mount before starting. The weight requirements of each mounting option are listed in the installation section for that mount (see *Mounting the Camera on page 30*).
2. Assemble the camera (see *Assembling the Camera on page 23*).
3. Prepare the cables that will be needed for installation. Each camera requires a power, video, and RS-485 connection (see *Dip Switches and Cable Connections on page 25*). The RS-485 connection is needed to connect to a keyboard/controller. Some installations may also require alarm input/output connections.
4. Use the corresponding dip switches to set the camera ID for the PTZ dome (see *ID Setting on page 26*). This step is required if you have more than one PTZ dome in your surveillance system.
5. Use the corresponding dip switches to set the camera control protocol for the PTZ dome (see *Camera Control Protocol Setting on page 27*).
6. Start mounting the camera. Follow the instructions included for the specific mount being used in your installation (see *Mounting the Camera on page 30*). Make sure to secure the camera during installation by connecting a safety cable from a secure part of the mounting structure to the eyelet on the back of the camera (see *Using Safety Cable During Installation on page 31*).
7. Route the cables through the mount and connect them to the camera and peripheral devices (see *Dip Switches and Cable Connections on page 25*).
8. Finish mounting the camera (see *Mounting the Camera on page 30*).
9. Configure the camera with the connected keyboard/controller (refer to *Chapter 4, Operation and Configuration*, *page 51*, for detailed instructions on configuring the camera settings).

Assembling the Camera

Camera assembly is quick and easy. To assemble the camera:

1. Take the camera and all other components out of the packaging.
2. Rotate and remove the protective cover bag from the camera body.
3. Use the torx driver to remove the dome cover.
4. Remove the foam and tape from inside the dome.
5. Remove the lens cap from the camera lens.
6. Use the torx driver to fasten the dome cover to the camera body.

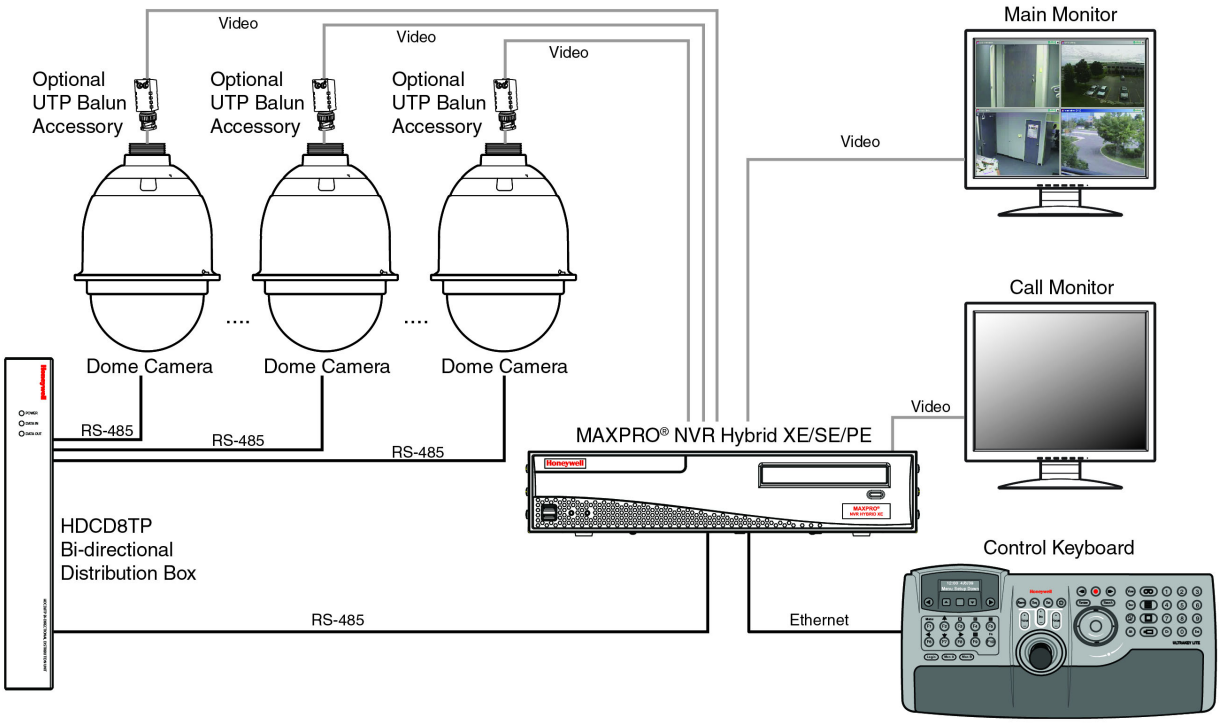
Note Optional: Use the lubricant on the dome cover's rubber ring to make it easier to re-attach to the housing and seal the PTZ dome cover and housing without water coming in. Be careful not to get any lubricant on the dome as it may interfere with viewing PTZ images.

7. Leave the protective film on the dome cover until installation is complete.

System Configuration

Connect the HDZ Series PTZ dome to the other devices in your system to complete the video surveillance solution. See *Figure 2-1* below for an example of a system setup.

Figure 2-1 HDZ Series System Configuration



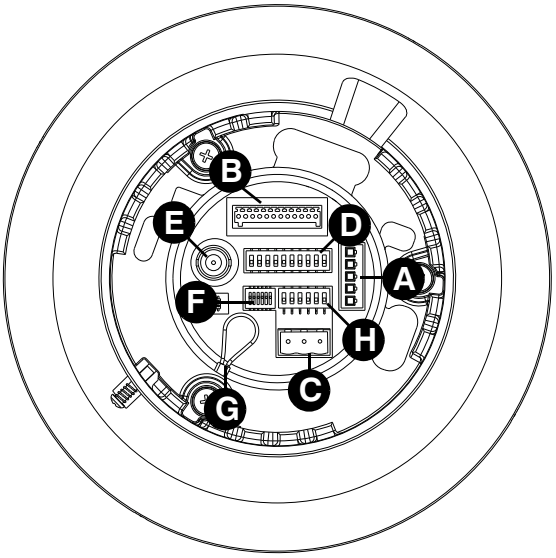
Note To extend the network distance up to 1.2 km (4000 feet) and to protect the connected devices, it is highly recommended to place a repeater at the mid-point of the cable connections. However, a repeater may also be needed when the network distance is less than 1.2 km if the cables used are not CAT 5, 24-gauge cables.

Dip Switches and Cable Connections

Before connecting the cables, take a minute to familiarize yourself with the camera's back plate connectors, switches, and buttons, as shown in *Figure 2-2* and *Table 2-2* below.

Figure 2-2 Camera Back Plate Layout

HDZ Indoor Dome Cameras



HDZ Outdoor Dome Cameras

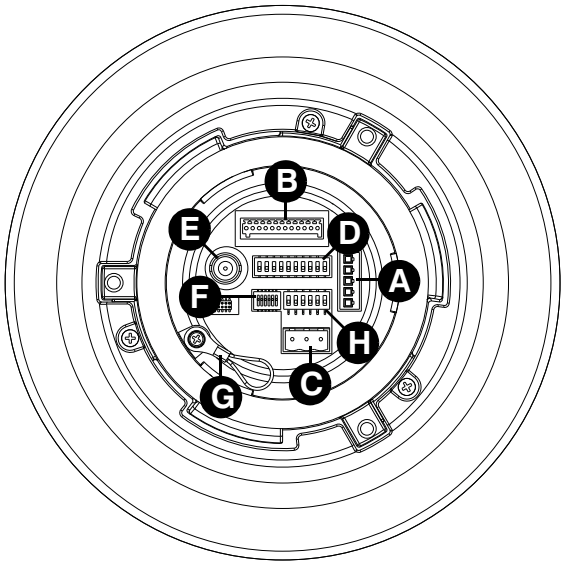


Table 2-2 Camera Back Plate Connectors, Switches, and Buttons

A	RS485 connector (see *Connecting RS485 on page 28* for more information)
B	Alarm Input/Output connector (see *Connecting Alarm Inputs/Outputs on page 29* for more information)[a]
C	Power connector (see *Connecting Power on page 29* for more information)[a]
D	ID setting dip switches (see *ID Setting on page 26* for more information)
E	BNC video output connector (see *Connecting Video on page 28* for more information)
F	Reserved[b]
G	Eyelet to secure camera to building with lanyard during camera setup
H	Camera control protocol dip switches (see *Camera Control Protocol Setting on page 27* for more information)

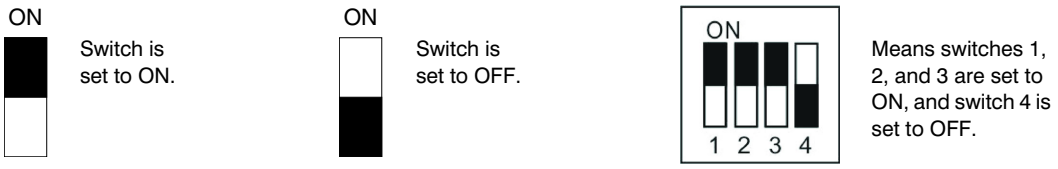
[a] Alarm and Power connections are made with removable connectors.

[b] These reserved switches are for setting the camera's communication (the RS485 communication setting). The default RS485 setting is half-duplex. Please do not change the default setting without a qualified specialist or supplier's notice.

Setting Dip Switches

When setting the dip switches for either the ID setting (see *ID Setting on page 26*) or camera control protocol (see *Camera Control Protocol Setting on page 27*), see the following ON/OFF positions as a reference (see *Figure 2-3*). Use the dip switch tool included with your unit to change the dip switch position, as needed.

Figure 2-3 Dip Switch ON/OFF Positions



Configuring the camera's ID and control protocol are required before connecting the camera to other devices (see *ID Setting, page 26*, and *Camera Control Protocol Setting on page 27*). Additionally, the 22-pin connector for data cable connection and ISP connector for firmware upgrade kit connection are also set on the back plate (but not shown in *Figure 2-2* or *Table 2-2*).

ID Setting

Assign an ID number to a HDZ Series PTZ dome camera if there is more than one camera in the same system. The camera's ID can be set by using the 10-bit ID dip switch (see *Figure 2-4*), which is located on the camera's back plate. If the camera's ID number is 6, for example, the ID switches SW2 and SW3 should be set to ON, and the rest should be set to OFF (see *Table 2-3* for ID settings). ID numbers 0–10 are listed in *Table 2-3*. For a full list of possible ID numbers, refer to *Appendix C, ID Settings* on *page 97*.

Figure 2-4 ID Setting Dip Switches

Note No two cameras in a network should be given the same camera ID. A communication conflict may occur.

Table 2-3 ID Switch Settings

ID No.	Switch Setting									
	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10
0	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
1	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
2	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
3	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
4	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF

Table 2-3 ID Switch Settings (cont'd)

ID No.	Switch Setting									
	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10
5	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
6	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
7	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
8	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
9	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
10	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF

Camera Control Protocol Setting

Define the protocol you are going to use on the devices of your surveillance system, based on the devices and protocols available. It is recommended to use one protocol on all devices, even with devices provided by different manufacturers. Use the 6-bit camera control protocol switch (see *Figure 2-5*) to set your camera's control protocol and its baud rate. Refer to *Table 2-4* and *Figure 2-5* for the setting details for all supported protocols with their matching switch numbers and baud rates to help choose and select a protocol for your camera. The images in *Figure 2-5*, below, show the dip switch configurations for the supported protocols.

Figure 2-5 Camera Control Protocol Dip Switch Settings

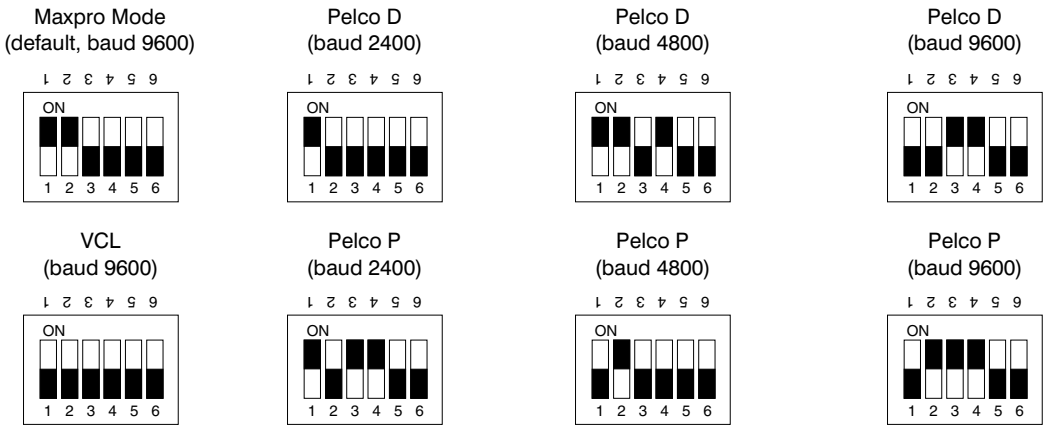


Table 2-4 Camera Control Protocol Switch Settings

Switch No.	Protocol	Baud Rate	Parity	Switch Setting					
				SW1	SW2	SW3	SW4	SW5	SW6
00	VCL	9600	None	OFF	OFF	OFF	OFF	OFF	OFF
01	Pelco D	2400	None	ON	OFF	OFF	OFF	OFF	OFF
02	Pelco P	4800	None	OFF	ON	OFF	OFF	OFF	OFF
03	Maxpro Mode[a] (default)	9600	Even	ON	ON	OFF	OFF	OFF	OFF
11	Pelco D	4800	None	ON	ON	OFF	ON	OFF	OFF

Table 2-4 Camera Control Protocol Switch Settings (cont'd)

Switch No.	Protocol	Baud Rate	Parity	Switch Setting					
				SW1	SW2	SW3	SW4	SW5	SW6
12	Pelco D	9600	None	OFF	OFF	ON	ON	OFF	OFF
13	Pelco P	2400	None	ON	OFF	ON	ON	OFF	OFF
14	Pelco P	9600	None	OFF	ON	ON	ON	OFF	OFF

[a] The Maxpro Mode protocol is also compatible with Diamond protocol.

Connecting RS485

Refer to *Figure 2-6* and *Table 2-5* when connecting a keyboard/controller to your camera through the RS485 connection. Honeywell UltraKey Touch (HJC4000) is recommended for use with the HDZ Analogue PTZ dome.

Figure 2-6 RS485 Connector

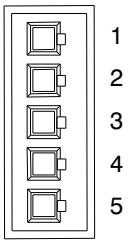


Table 2-5 RS485 Pin Definitions

Pin	Definition
1	R– (RS485–)
2	GND
3	R+ (RS485+)
4	T–
5	T+

Connecting Video

You have two options for connecting to the video output port on the camera. The option that you pick will depend on what type of cabling you are using for the installation:

- **Coaxial cable** (preferred method). Connect the coaxial cable to the camera's BNC video output port, and connect the other end of the cable to the video input port on your monitor/switch/quad/mux/DVR.
- **Unshielded twisted pair cable** (UTP, optional). Connect the camera's BNC video output port to the optional UTP (unshielded twisted pair) balun accessory provided with your unit. Connect one end of the unshielded twisted pair cable to the video input connection on your monitor/switch/quad/mux/DVR and the other end of the UTP cable to the UTP balun output connections.
  The passive UTP balun included in the package is suitable for UTP transmission distances of up to 100 m (328 ft). Please use an active UTP balun (not included with camera) for transmission distances longer than 100 m (328 ft).

Connecting Power

WARNING To comply with EN50130-4 requirements, a UPS should be employed when powering the camera.

Refer to *Figure 2-7* and *Table 2-6* for the power connector definition before wiring power to the camera.

CAUTION Check the pin definition of the power connector listed here before connecting to the power source. The 24 V AC power source should be connected to the first and third pin. The unit could be damaged with an incorrect connection.

Figure 2-7 Main Power Adapter Input (Detail)

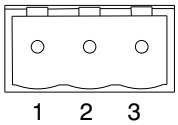


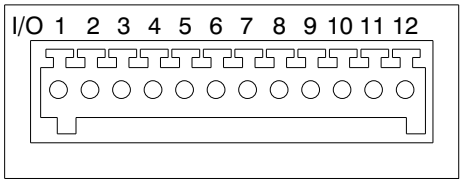
Table 2-6 Power Input Pin Definitions

Pin	Definition
1	24 V AC - 1
2	GND
3	24 V AC - 2

Connecting Alarm Inputs/Outputs

Refer to *Figure 2-8* and *Table 2-7* when making alarm connections to your camera through the main alarm adapter.

Figure 2-8 Main Alarm Adapter Input (Detail)



Inputs (x4) 5V, 4700 Ohms, pull up

Outputs (x2) Relay output, 120 V AC/30 V DC

Table 2-7 Alarm Input Pin Definitions

Pin	Definition	Pin	Definition
1	Alarm Out NO 1	7	Alarm Out COM 2
2	Alarm Out NC 1	8	GND
3	Alarm Out COM 1	9	Alarm In 4
4	GND	10	Alarm In 3
5	Alarm Out NO 2	11	Alarm In 2
6	Alarm Out NC 2	12	Alarm In 1

Mounting the Camera

You can install the camera to a ceiling, wall, pole, parapet, or roof using one of the following Honeywell products:

Table 2-8 Honeywell Mounts and Adapters

Model No.	Description	Indoor	Outdoor
HDCM1	Ceiling Mount	X	
HDXWM2	Wall Mount	X	X
HDPRM2	Parapet/Flat Roof Mount	X	X
HDZINBKT	In-Ceiling mounting bracket for the HDZ series.	X	
HDXCMA1	Corner Mount Adapter for HDXWM2	X	X
HDXPMA2	Pole Mount Adapter for HDXWM2	X	X

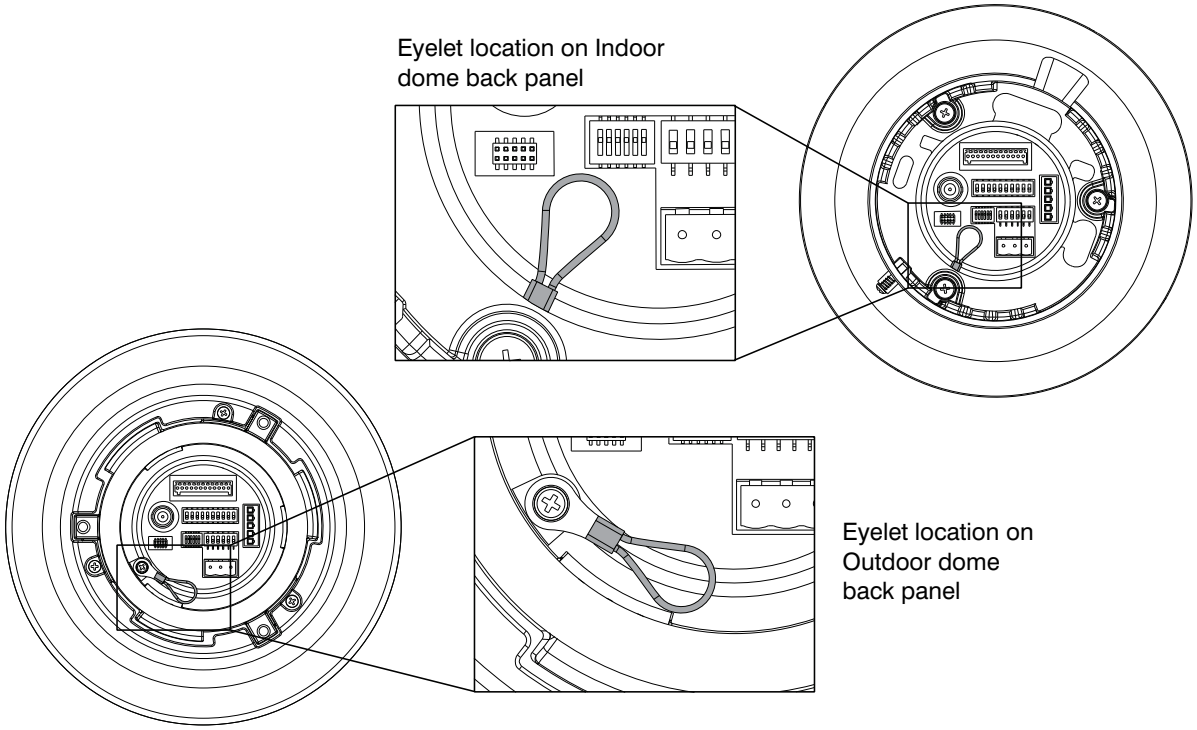
Note An In-ceiling mounting bracket (HDZINBKT) is available. Check with your Honeywell supplier regarding In-ceiling mounting. See *Appendix D, In-Ceiling Bracket Installation*, for in-ceiling bracket mounting instructions.

For additional information, see *Related Documents on page 16*.

Using Safety Cable During Installation

The HDZ Series PTZ camera includes an eyelet for attaching a safety cable to securely fix the camera to the mounting structure (see *Figure 2-9*). It is recommended that you install a safety cable (such as a 3/32-in. [2.4 mm] plastic coated aircraft cable) to secure the camera to the building structure. This will prevent the camera from falling during installation. The cable must be strong enough to support the weight of the camera (indoor model: 4.9 lb. [2.2 kg], outdoor model: 5.7 lb. [2.6 kg]).

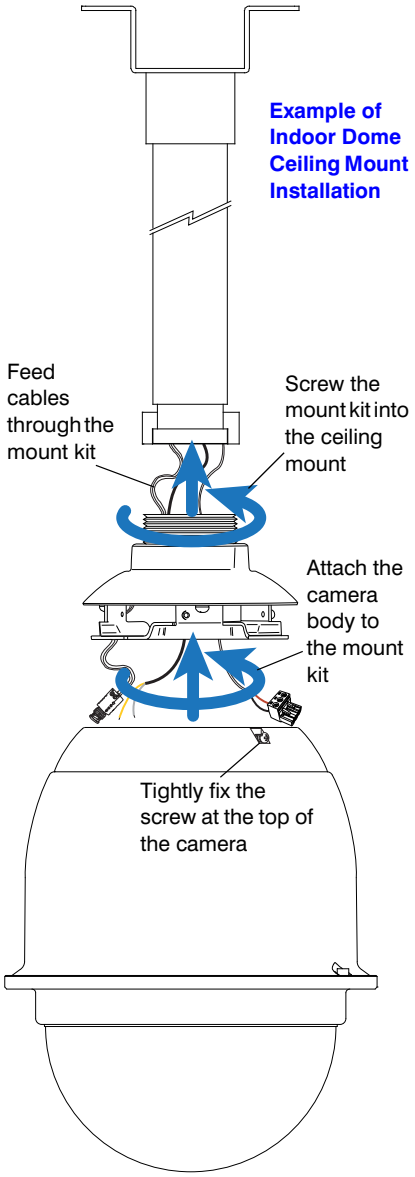
Figure 2-9 Eyelet on Camera to Secure by Lanyard During Setup



Installing a Ceiling Mount (Indoor Only)

The HDCM1 ceiling mount weighs 4.0 lb. (1.8 kg) and can be installed directly to a load-bearing ceiling. The mount has a maximum load rating of 26.0 lb. (11.7 kg) and is for indoor use only. See the documentation included with the ceiling mount for more information on securing the mount to the mounting surface.

Figure 2-10 HDCM1 Ceiling Mount Installation


Example of Indoor Dome Ceiling Mount Installation
Feed cables through the mount kit
Screw the mount kit into the ceiling mount
Attach the camera body to the mount kit
Tightly fix the screw at the top of the camera

To install a ceiling mount:

1. Ensure that the ceiling can support the combined weight of the camera and the mount (should support at least 8.8 lb. [4.0 kg]).
2. Make a cable entry hole in the ceiling.
3. Feed the cables through the mount, leaving approximately 1 ft (0.3 m) extending past the end of the mount (see *Figure 2-10*).

Note If you are using the recommended safety cable for additional security, feed it through the mount and attach one end to the camera eyelet and the other end to the building structure (see *Figure 2-9*).

4. Attach the mount to the ceiling using appropriate hardware.
5. Feed the cables through the indoor mount kit and screw the indoor mount kit onto the ceiling mount.
6. Connect the cables to the camera (see *Dip Switches and Cable Connections on page 25*). Connect the video output port either to a coaxial cable (with BNC connection) or with optional UTP balun accessory if unshielded twisted pair cabling is used.

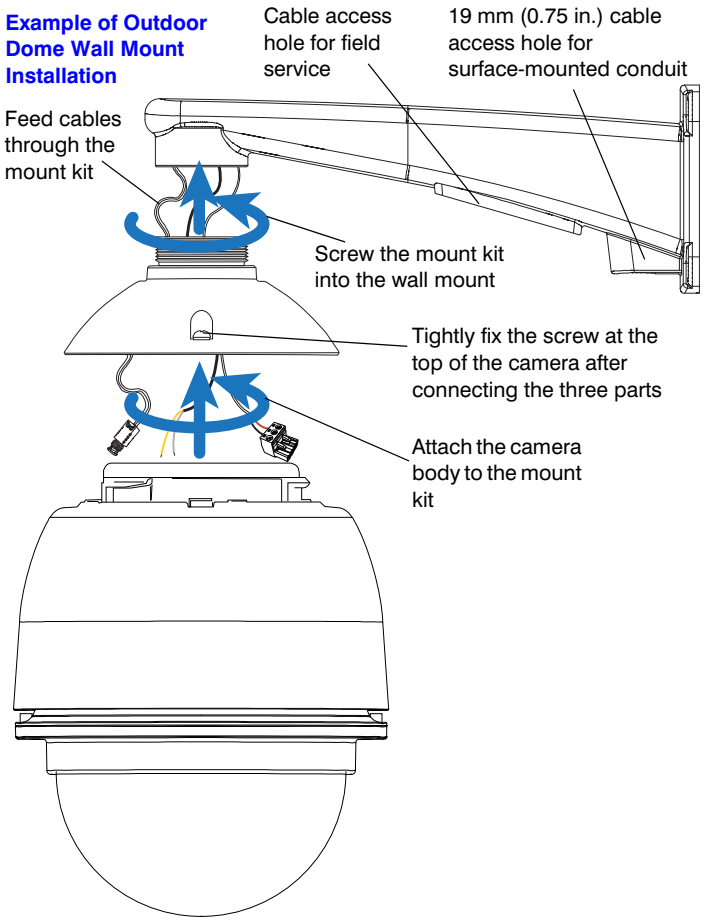
Note Check that the eyelet safety cable connection is secure, and carrying all of the load of the camera after making all cable connections.

7. Attach the camera to the mount kit and then tightly fix the security screw on the top of the camera.

Installing a Wall Mount

The HDXWM2 wall mount weighs 3.2 lb. (1.45 kg) and can be installed directly to a load-bearing wall, or to a corner or pole using an appropriate adapter. The mount has a maximum load rating of 25.8 lb. (11.7 kg) and can be installed indoors or outdoors. See the documentation included with the wall mount for more information on securing the mount to the mounting surface.

Figure 2-11 HDXWM2 Wall Mount Installation


Example of Outdoor Dome Wall Mount Installation
Cable access hole for field service
19 mm (0.75 in.) cable access hole for surface-mounted conduit
Feed cables through the mount kit
Screw the mount kit into the wall mount
Tightly fix the screw at the top of the camera after connecting the three parts
Attach the camera body to the mount kit

To install a wall mount:

1. Ensure that the mounting surface can support the combined weight of the camera and the mount (should support at least 8.9 lb. [4.05 kg]).
2. If you are using a corner or pole adapter, feed the cables through the cable access hole of the adapter, and then attach the adapter to the mounting surface using appropriate mounting hardware.
3. Feed the cables through the mount, leaving approximately 1 ft (0.3 m) extending past the end of the mount.

   Optionally, you can feed the cables through the 0.75 in. (19 mm) conduit hole at the base of the mount arm (see *Figure 2-11*).

Note If you are using the recommended safety cable for additional security, feed it through the mount and attach one end to the camera eyelet and the other end to the building structure (see *Figure 2-9*).

4. Attach the mount to the wall or, if applicable, to the adapter using appropriate mounting hardware.
5. For outdoor wall mount installations, apply sealant (not supplied) to any gaps between the mount and the mounting surface, and ensure that the conduit hole plug is in place when the conduit hole at the base of the mount arm is not in use.
6. Feed the cables through the mount kit and screw the mount kit onto the wall mount.
7. Connect the cables to the camera (see *Dip Switches and Cable Connections on page 25*). Connect the video output port either to a coaxial cable (with BNC connection) or with optional UTP balun accessory if unshielded twisted pair cabling is used.

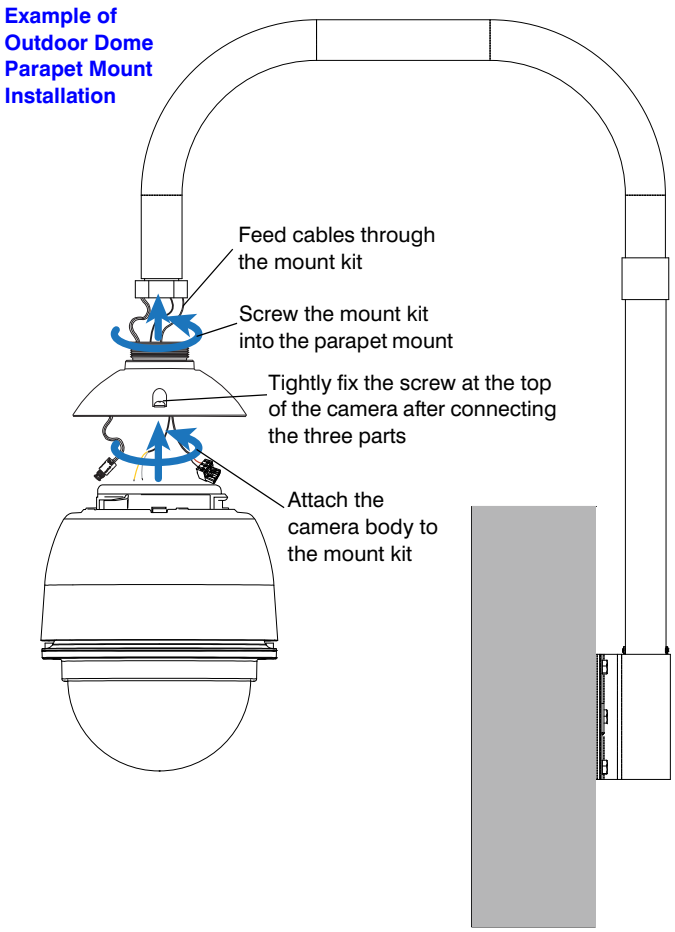
Note Check that the eyelet safety cable connection is secure, and carrying all of the load of the camera after making all cable connections.

8. Attach the camera to the mount kit and then tightly fix the security screw on the top of the camera.

Installing a Parapet/Flat Roof Mount

The HDPRM2 parapet/flat roof mount weighs 22.5 lb. (10.2 kg) and can be installed directly to a vertical (parapet) or horizontal (flat roof) load-bearing surface. The mount has a maximum load rating of 20.1 lb. (9.1 kg) and can be installed indoors or outdoors. The mount can withstand winds up to 75 mph (121 km/h) when properly fastened to a support structure. See the documentation included with the parapet mount for more information on securing the mount to the mounting surface.

Figure 2-12 HDPRM2 Parapet/Flat Roof Mount Installation


Example of Outdoor Dome Parapet Mount Installation
Feed cables through the mount kit
Screw the mount kit into the parapet mount
Tightly fix the screw at the top of the camera after connecting the three parts
Attach the camera body to the mount kit

To install a roof mount:

1. Ensure that the mounting surface can support the combined weight of the camera and the mount (should support at least 28.2 lb. [12.8 kg]).
2. Feed the cables through the mount, leaving approximately 1 ft (0.3 m) extending past the end of the mount.

Note If you are using the recommended safety cable for additional security, feed it through the mount and attach one end to the camera eyelet and the other end to the building structure (see *Figure 2-9*).

3. Attach the mount to the mounting surface using as many of the mounting holes as possible (a minimum of five fasteners on each side of the mounting plate is recommended).
4. Apply sealant (not supplied) to the bottom of the vertical pipe and around the bolt holes to prevent water or other contaminants from entering the mount.
5. Feed the cables through the mount kit and screw the mount kit into the parapet/flat roof mount.
6. Connect the cables to the camera (see *Dip Switches and Cable Connections on page 25*). Connect the video output port either to a coaxial cable (with BNC connection) or with optional UTP balun accessory if unshielded twisted pair cabling is used.

Note Check that the eyelet safety cable connection is secure, and carrying all of the load of the camera after making all cable connections.

7. Attach the camera to the mount kit and then tightly fix the security screw on the top of the camera.

3

Understanding the OSD

Included in this chapter:

- *Pre-Configuration Checklist, page 35*
- *Navigating OSD Menus, page 37*
- *OSD Menu Tree, page 39*
- *Basic Keyboard Controls, page 48*
- *Accessing the Main Menu, page 36*
- *On-Screen Display Overview, page 37*
- *OSD Menu Structure, page 42*
- *Upgrading Analogue PTZ Firmware, page 49*

Pre-Configuration Checklist

After you have installed the PTZ dome, you are ready to begin configuring the dome settings from the OSD menu. You will need a keyboard controller and a monitor to do this.

The HDZ Series Analogue PTZ Dome is compatible with Honeywell controllers:

- UltraKey Touch (HJC4000)

The HDZ Series Analogue PTZ Dome is also compatible with third-party controllers using Pelco P or Pelco D control protocols.

Preparing to Configure the Dome

1. Make sure the dome is assigned to the controller you are using. The dome address (for example, CAM 001) should appear on the controller LCD. See *ID Setting on page 26* for more information on setting the PTZ dome's camera ID.
2. Turn on the dome. See *Connecting Power on page 29* for more information on powering the camera.
3. Confirm that video is displayed on the monitor. See *Connecting Video on page 28* for more information on connecting video to a monitor. A startup screen should appear after the dome boots up, showing the protocol, baud rate, camera type, camera ID, and firmware version of the dome.

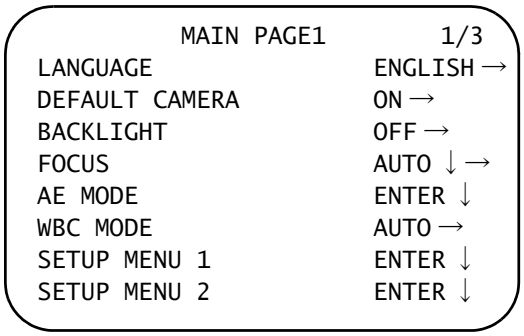
The detailed functions and parameter settings of your HDZ Series dome can be set through the OSD (On Screen Display) menu with a control keyboard. The setup options in the OSD menu are described in *Chapter 4, Operation and Configuration*. See *Accessing the Main Menu on page 36* for details on accessing the OSD menu for configuring the camera.

Accessing the Main Menu

To enter the OSD menu of the selected camera, use the **PRESET 90** command on the control keyboard. The OSD menu will open (see *Figure 3-1*). Depending on the keyboard controller used, the buttons to press to input PRESET 90 will be different. See the following UltraKey example:

UltraKey Touch Press **View** ➤ **9** ➤ **0** ➤ **Ent**.

Figure 3-1 Main Menu Screen

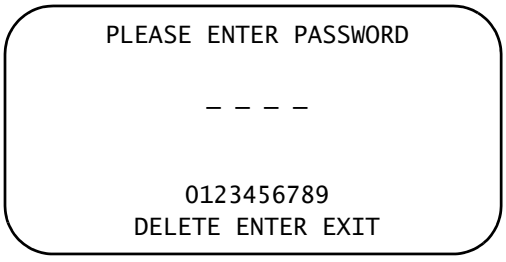


Note Because the HDZ Series Analogue PTZ Dome is designed to work with a wide variety of devices and protocols, all possible ways to perform a task are not given here. The instructions in this guide are intended to supplement the instructions provided in your controller's user guide.

Using the OSD Password to Login

If OSD Password function is enabled, when you press the **CAMERA MENU** key to enter the OSD menu, the password request message will be displayed as shown in *Figure 3-2*. Please enter the password, select **ENTER** and press **IRIS+** to access the OSD main menu.

Figure 3-2 Enter Password Screen



Note When first time turning the Password Function on, please enter the Master Password to setup the new password.
Master Password: **9527**.

Navigating OSD Menus

To select the setup item, use the joystick or direction keys on the keyboard to move the OSD cursor in the OSD menu.

To setup items, use the joystick or direction keys on the keyboard to move the OSD cursor to the item. For items with the → symbol beside them, press right/left with the joystick or direction keys to select the function. For items with the ↓ symbol beside them, press the **IRIS+** key on the control keyboard to open the sub menu for that item. For items with the → ↓ symbols beside them, users can use the right/left joystick/direction keys to select the functions, and then press the **IRIS+** key to open the sub menu for the selected item.

For more detailed information on PTZ operation and OSD menu navigation, refer to the user manual of your installed keyboard/control devices.

Note In the Camera OSD menu, the **IRIS+** key functions as **ENTER** and the **IRIS–** key functions as back/**EXIT**.

During the HDZ Series PTZ dome camera's startup process, the OSD Start Page will display information including the camera ID number, protocol/baud rate and camera initializing message. Additionally, if some camera errors occur, the error message(s) will be shown on the screen at start-up. If the problem(s) cannot be immediately solved, please contact your supplier for assistance.

On-Screen Display Overview

The HDZ Series PTZ camera on-screen display (OSD) elements are described in *Table 3-1* below. *Figure 3-3* shows a monitor example with OSD elements numbered. *Table 3-1* describes the elements shown in *Figure 3-3*.

Figure 3-3 OSD Display Elements

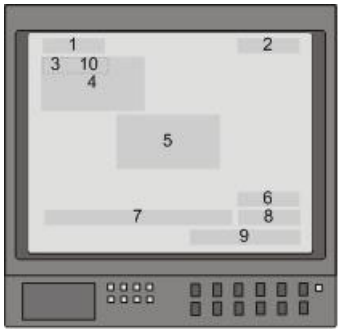


Table 3-1 OSD Item Descriptions

No.	Function	OSD Display	Description
1	Motion	MOTION	Alarm Detect Message
2	Alarm	ALARM 1	Alarm Message
3	Focus Modes and Backlight	A	Auto Focus Mode
		M	Manual Focus Mode
		X	Backlight Compensation OFF
		B	Backlight Compensation ON
4	Booting Message	XX... (Dome Type); ID; 001 (Default) Maxpro Mode / 9600 (Default) INITIALIZING	Shows Dome Type, ID Address, Protocol and Baud Rate
5	Error Message	PAN ERROR TILT ERROR CAM MODULE ERROR	Shows system initializing error message
6	Zoom Ratio	x1	Shows the current zoom ratio (Optical zoom/Digital zoom)
7	Title	• Maximum 20 characters for each title. • 16 sets of titles are available.	
8	Camera ID	001	Show the camera ID
9	Time	XXXX / XX / XX XX : XX	Year / Month / Day Hour : Minute
10	Position Display	XX YYY / YY	**XX**: Facing direction of the PTZ including N, E, S, W, NE, NW, SE, SW **YYY** / **YY**: Angle of PTZ, 0 ~ 359 / 10 ~ −90

OSD Menu Tree

The HDZ Series Analogue PTZ camera has an OSD menu to be used for setting up the camera options and features (presets, privacy masks, and so on). The main OSD menu is split into 3 pages that you can scroll through after opening the OSD menu (see *Accessing the Main Menu on page 36*). Refer to:

- *Figure 3-4*, *page 39*, for a basic overview of the OSD Main Page 1 menus
- *Figure 3-5*, *page 40*, for a basic overview of the OSD Main Page 2 menus
- *Figure 3-6*, *page 41*, for a basic overview of the OSD Main Page 3 menus
- *Table 3-2*, *page 42*, for more details about the settings and options of the OSD menus

Figure 3-4 Main Page 1 OSD Menus

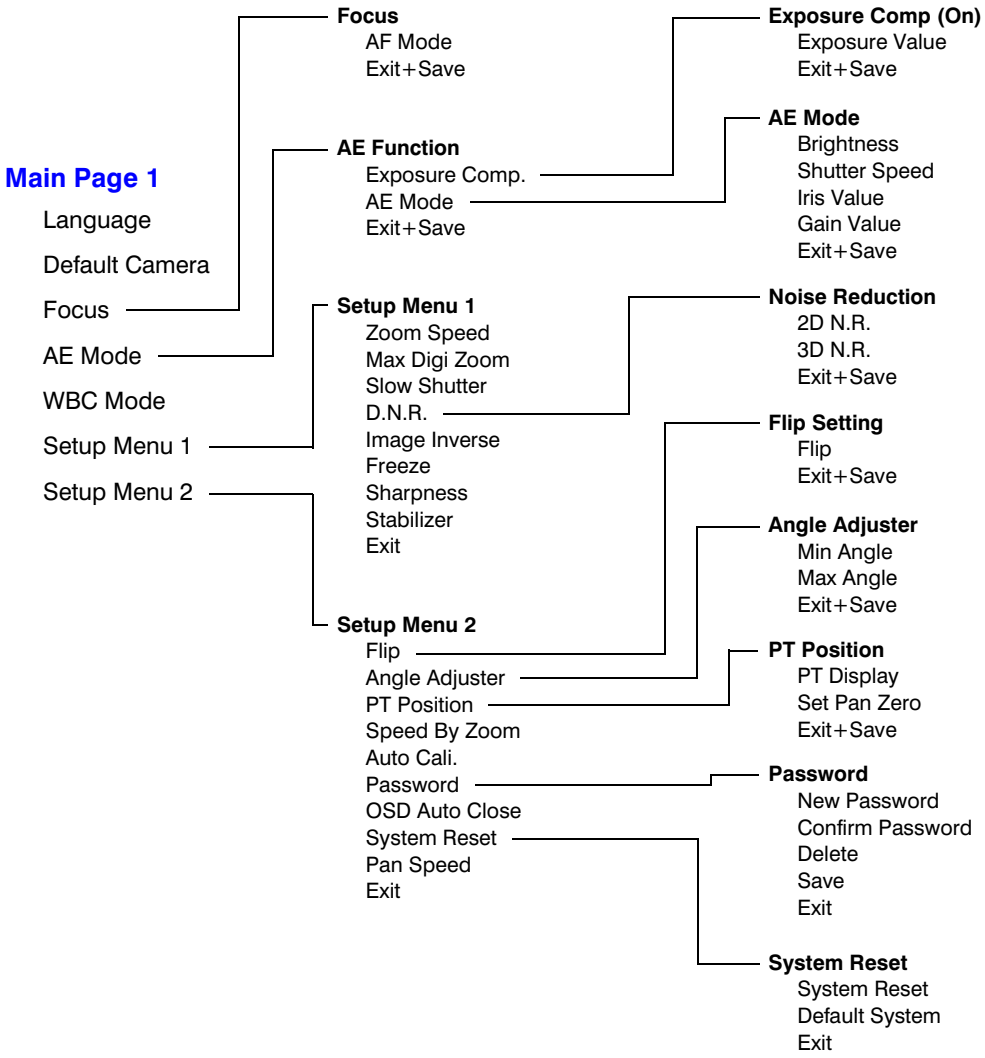


Figure 3-5 Main Page 2 OSD Menus

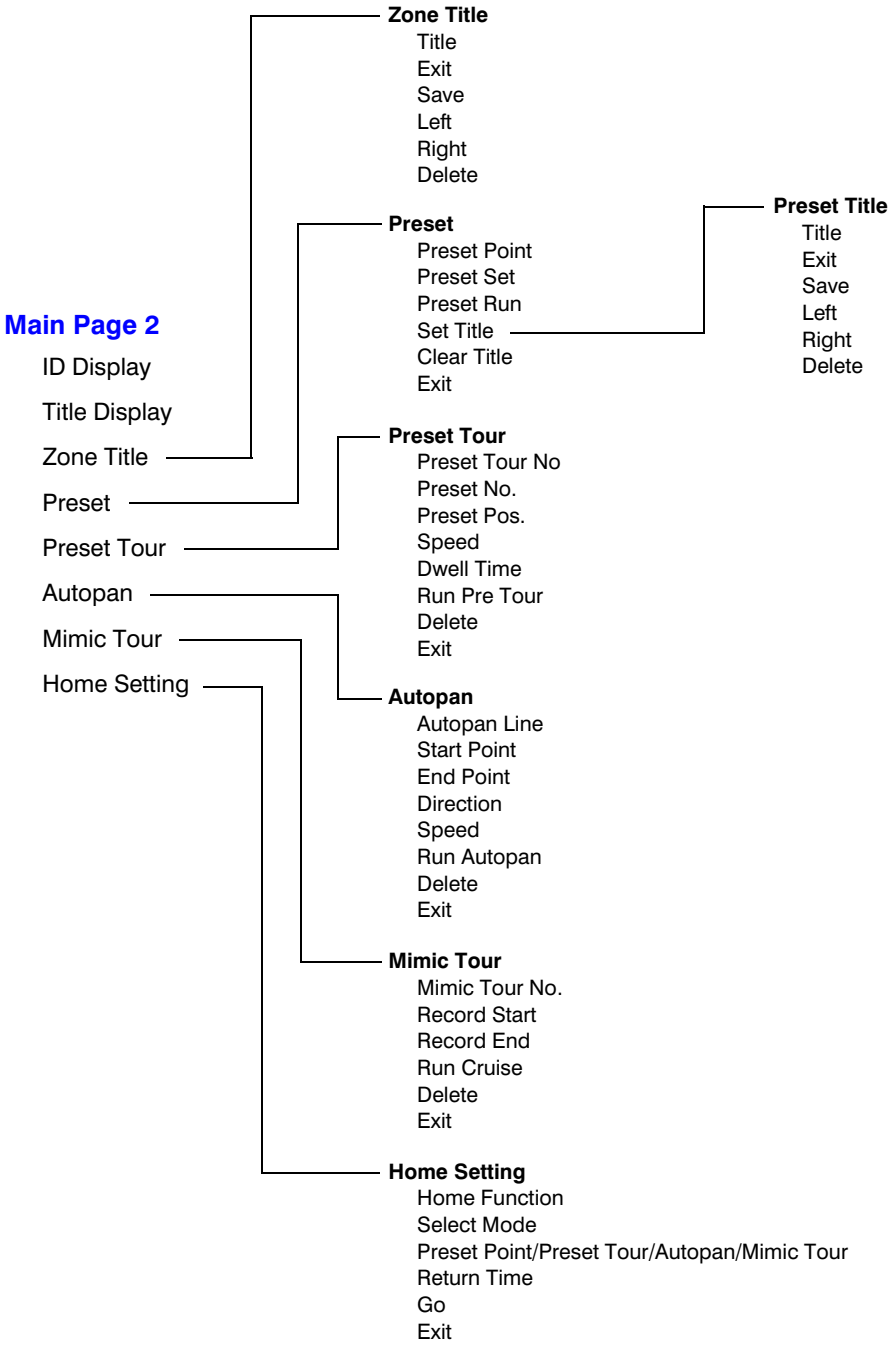
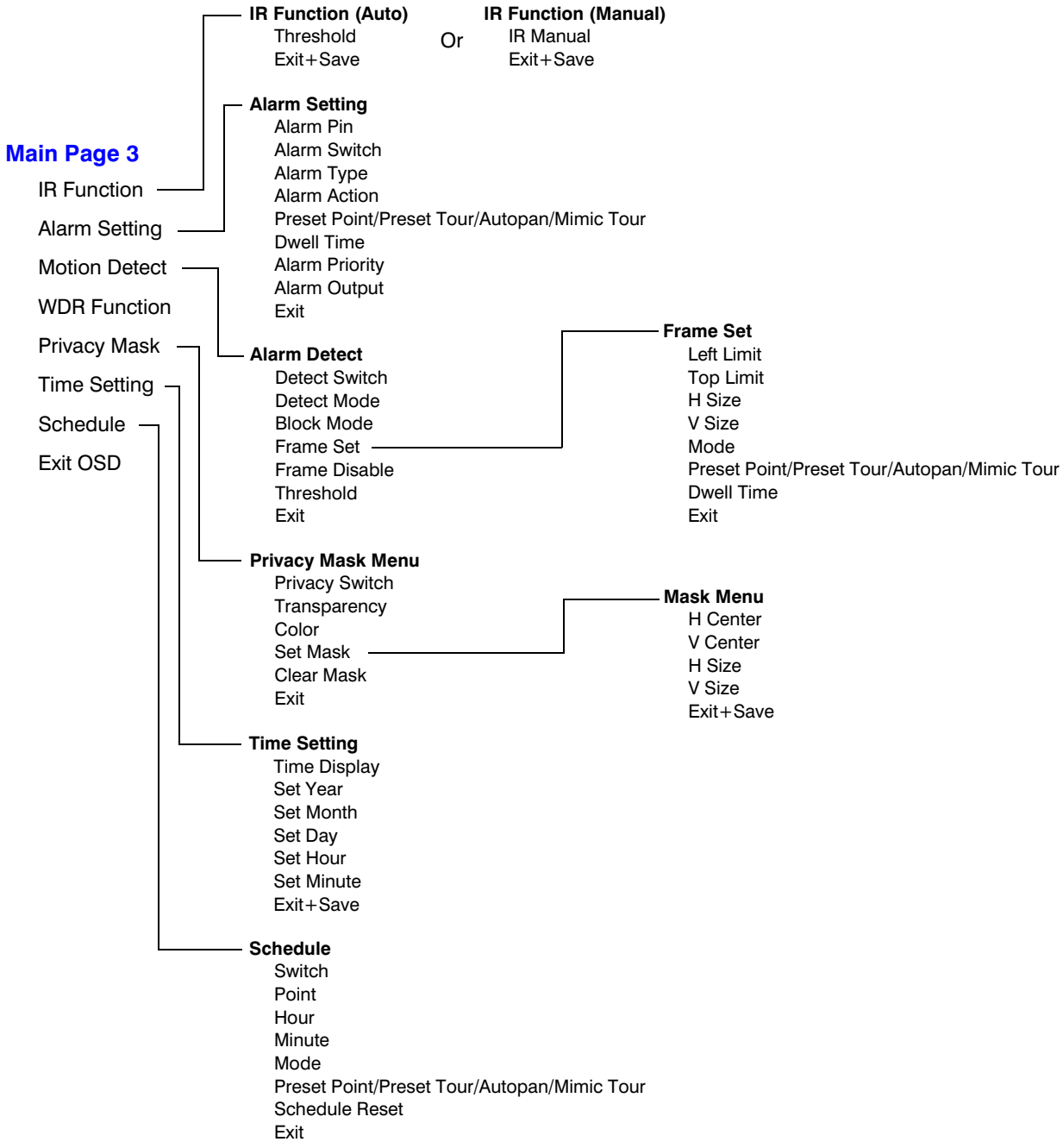


Figure 3-6 Main Page 3 OSD Menus



OSD Menu Structure

Table 3-2 lists the OSD menu structure details. More information about making setting changes can be found in *Chapter 4, Operation and Configuration*. Default selections are indicated in the last column.

Table 3-2 OSD Menu Structure

Item	Layer 1	Layer 2	Layer 3	Default
LANGUAGE	ENGLISH, JAPANESE, PORTUGUESE, SPANISH, FRENCH, GERMAN, ITALIAN, POLISH, RUSSIAN, TRADITIONAL CHINESE, SIMPLIFIED CHINESE, TURKISH, DUTCH, CZECH			ENGLISH
DEFAULT CAMERA	ON, OFF			ON
BACKLIGHT	ON, OFF			OFF
FOCUS	AUTO	AF MODE: NORMAL, Z. TRIG, PTZ TRIG.		PTZ TRIG.
		EXIT+SAVE		
	MANUAL			
AE MODE	EXPOSURE COMP.	OFF		OFF
		ON	EXPOSURE VALUE: -10.5dB ~ 10.5dB	
			EXIT+SAVE: YES	
	AE MODE	AUTO	BRIGHTNESS/SHUTTER SPEED/ IRIS VALUE/GAIN VALUE: AUTO	AUTO
			EXIT+SAVE: YES	
		SHUTTER	SHUTTER SPEED PAL: 1/50 ~ 1/10000 SEC. NTSC: 1/60 ~ 1/10000 SEC.	
			EXIT+SAVE: YES	
		IRIS	IRIS VALUE: F1.6 ~ F28	
			EXIT+SAVE: YES	
		MANUAL	BRIGHTNESS: AUTO	
			SHUTTER SPEED PAL: 1/50 ~ 1/10000 SEC. NTSC: 1/60 ~ 1/10000 SEC.	
			IRIS VALUE: F1.6 ~ F28	
			GAIN VALUE: -3dB ~ 28dB	
			EXIT+SAVE: YES	
	EXIT+SAVE	YES		

Table 3-2 OSD Menu Structure (cont'd)

Item	Layer 1	Layer 2	Layer 3	Default
WBC MODE	AUTO (Auto White Balance)			✓
	INDOOR			
	OUTDOOR			
	ATW (Auto-tracing WBC)			
	MANUAL	R GAIN 000 ~ 127		
		B GAIN 000 ~ 127		
		EXIT+SAVE: YES		
SETUP MENU 1	ZOOM SPEED	8		8
	MAX. DIGITAL ZOOM	OFF, 2x ~ 12x		OFF
	SLOW SHUTTER	ON, OFF		OFF
	D.N.R.	2D N.R.	ON, OFF	ON
		3D N.R.	OFF, 1, 2, 3, 4, 5	OFF
		EXIT+SAVE: YES		
	IMAGE INVERSE	ON, OFF		OFF
	FREEZE	ON, OFF		ON
	SHARPNESS	01 ~ 16		7
	STABILIZER	ON, OFF		OFF
	EXIT	YES		

Table 3-2 OSD Menu Structure (cont'd)

Item	Layer 1	Layer 2	Layer 3	Default
SETUP MENU 2	FLIP	OFF, M.E., IMAGE		IMAGE
		EXIT+SET: YES		
	ANGLE ADJUSTER	MIN ANGLE	-10 ~ +10 DEG	-10 DEG
		MAX ANGLE	080 ~ 100 DEG	190 DEG
		EXIT+SET	YES	
	PT POSITION	PT DISPLAY	ON, OFF	OFF
		SET PAN ZERO	PT MOVE, TO SAVE	
		EXIT+SET	YES	
	SPEED BY ZOOM	ON, OFF		ON
	AUTO CALI.	ON, OFF		OFF
	PASSWORD	ON, OFF		OFF
	OSD AUTO CLOSE	OFF, 10 ~ 30 SEC.		20
	SYSTEM RESET	SYSTEM RESET: YES		
		DEFAULT SYSTEM: YES		
		EXIT: YES		
	PAN SPEED	50, 100, 200		200
	EXIT	YES		
ID DISPLAY	ON, OFF			OFF
TITLE DISPLAY	ON, OFF			OFF
TITLE ZONE	01 ~ 16	Press ENTER to create a title for the zone		01
PRESET	PRESET POINT	001 ~ 256		001
	PRESET SET	PT MOVE, TO SAVE		PT MOVE
	PRESET RUN	ENTER		ENTER
	SET TITLE	ENTER		ENTER
	CLEAR TITLE	ENTER		ENTER
	EXIT	YES		ENTER

Table 3-2 OSD Menu Structure (cont'd)

Item	Layer 1	Layer 2	Layer 3	Default
PRESET TOUR	PRESET TOUR NO.	1 ~ 16		01
	PRESET NO.	01 ~ 32		01
	PRESET POS.	001 ~ 255, END		END
	SPEED	01 ~ 15		1
	DWELL TIME	000 ~ 127 SEC.		0
	RUN PRE TOUR	ENTER		
	DELETE	ENTER		
	EXIT	YES		
AUTOPAN	AUTOPAN LINE	1 ~ 4		1
	START POINT	PT MOVE, TO SAVE		
	END POINT	PT MOVE, TO SAVE		
	DIRECTION	RIGHT, LEFT		RIGHT
	SPEED	01 ~ 04		01
	RUN AUTOPAN	ENTER		
	DELETE	ENTER		
	EXIT	YES		
MIMIC TOUR	MIMIC TOUR NO.	1 ~ 16		01
	RECORD START	PT MOVE, TO SAVE		PT MOVE
	RECORD END	PT MOVE, TO SAVE		PT MOVE
	RUN MIMIC	ENTER		
	DELETE	ENTER		
	EXIT	YES		
HOME SETTING	HOME FUNCTION	ON, OFF		OFF
	SELECT MODE	PRESET, P. TOUR, AUTOPAN, M. TOUR		PRESET
	PRESET POINT	001 ~ 256		001
	PRESET TOUR	1 ~ 16		001
	AUTOPAN	1 ~ 4		001
	MIMIC TOUR	1 ~ 16		001
	RETURN TIME	1 ~ 128 MIN.		001
	GO	ENTER		
	EXIT	YES		

Table 3-2 OSD Menu Structure (cont'd)

Item	Layer 1	Layer 2	Layer 3	Default
IR FUNCTION	AUTO	THRESHOLD	MID, HI, LOW	LOW
		EXIT+SAVE	YES	
	MANUAL	IR MANUAL	ON, OFF	
		EXIT+SAVE	YES	
ALARM SETTING	ALARM PIN	1 ~ 4		1
	ALARM SWITCH	ON, OFF		OFF
	ALARM TYPE	NO (Normal Open), NC (Normal Close)		NC
	ALARM ACTION	PRESET, P. TOUR, AUTOPAN, M. TOUR		PRESET
	PRESET POINT	001 ~ 256		001
	PRESET TOUR	1 ~ 16		001
	AUTOPAN	1 ~ 4		001
	MIMC TOUR	1 ~ 16		001
	DWELL TIME	ALWAYS, 001 ~ 127 SEC. (only for PRESET option)		001 SEC
	ALARM PRIORITY	1 ~ 4		1
	ALARM OUTPUT	OFF, 1, 2, 1+2		1+2
	EXIT	YES		
MOTION DETECT	DETECT SWITCH	ON, OFF		OFF
	DETECT MODE	MOTION		
	BLOCK MODE	MOTION: ON, OFF		OFF
	FRAME SET	MOTION: 1 ~ 4	FRAME SET 1-4	
	FRAME DISABLE	MOTION: 1 ~ 4		
	THRESHOLD	NONE, MOTION: 001 ~ 255		
	EXIT	YES		
WDR FUNCTION	ON, OFF			ON

Table 3-2 OSD Menu Structure (cont'd)

Item	Layer 1	Layer 2	Layer 3	Default
	PRIVACY SWITCH	ON, OFF		OFF
	TRANSPARENCY	ON, OFF		OFF
	COLOR	BLACK, WHITE, RED, GREEN, BLUE, CYAN, YELLOW, MAGENTA, MOSAIC 1-3		BLACK
PRIVACY MASK	SET MASK	01 ~ 20	H CENTER: L/R	
			V CENTER: D/U	
			H SIZE 000 ~ 080	000
			V SIZE 000 ~ 060	000
			EXIT+SAVE	
	CLEAR MASK	01 ~ 20		1
	EXIT	YES		
TIME SETTING	TIME DISPLAY	ON, OFF		OFF
	SET YEAR	00 ~ 99		
	SET MONTH	01 ~ 12		
	SET DAY	01 ~ 31		
	SET HOUR	00 ~ 23		
	SET MINUTE	00 ~ 59		
	EXIT+SAVE	YES		
SCHEDULE	SWITCH	ON, OFF		OFF
	POINT	01 ~ 32		01
	HOUR	00 ~ 23		00
	MINUTE	00 ~ 59		00
	MODE	NONE	NO FUNCTION	✓
		PRESET	PRESET POINT 001 ~ 256	
		P. TOUR	PRESET TOUR 1 ~ 16	
		AUTOPAN	AUTOPAN 1 ~ 4	
		M. TOUR	MIMIC TOUR 1 ~ 16	
		IR FUNC.	IR FUNCTION AUTO, ON, OFF	
	SCHEDULE RESET	YES		
	EXIT	YES		
EXIT OSD	YES			

Basic Keyboard Controls

HDZ Series analogue PTZ dome is compatible with the UltraKey Touch (HJC4000). The control keyboards have some predefined commands to perform functions with the camera. See the following sections for more information on these commands.

The setup options in the OSD menu are described in *Chapter 4, Operation and Configuration*.

Sending the Dome to a Preset

A preset is a memorized PTZ position, showing a specific field of view, that can be recalled manually by the operator, or automatically moved to when triggered by an event, such as motion.

To go to a preset using the UltraKey controller (HJC4000), press **View**, then the *preset number*, and then **Enter**.

For example: Press **View** ➤ **1** ➤ **4** ➤ **Ent** to tell the camera to go to **Preset 14**.

Special Presets

Special presets 72 to 99 are reserved for controlling and programming the dome. Do not program preset positions for presets 72 to 99. See for a list of the special presets and their functions.

Table 3-3 Special Presets

Preset	Function	Protocol
72	Recover encrypted user login	Diamond, MAXPRO-mode, VCL, Pelco P, Pelco D
73	Enable broadcast command receive mode (displays: `Broadcast RX Mode ON`)	
74	Disable broadcast command receive mode (displays: `Broadcast RX Mode OFF`)	
75	Opens Setup Menu 1 with the password field selected	
76	Run mimic tour 1–16	MAXPRO-mode, VCL, Pelco P, Pelco D
77	Program mimic tour	
78	Run preset tour 1–16	
79	User default setting preset	Diamond, MAXPRO-mode, VCL, Pelco P, Pelco D

Table 3-3 Special Presets (cont'd)

Preset	Function	Protocol
80, 81, 82	Run mimic tours 1, 2, and 3	MAXPRO-mode, VCL, Pelco P, Pelco D
83, 84, 85	Program mimic tours 1, 2, and 3	
86	End mimic tour programming mode	
87, 88, 89	Start/run preset tours 1, 2, and 3	
90	Open setup menu (OSD menus)	
91, 97, 99	Reserved	
92	Toggle between auto exposure and iris priority	MAXPRO-mode, VCL, Pelco P, Pelco D
93	Toggle backlight compensation on or off	
94	Toggle between day mode and night mode	
95	Toggle freeze function on or off	
96	Run the flashback function (toggles between last two saved positions)	
98	Camera reset (cycles power to the camera)	Diamond, MAXPRO-mode, VCL, Pelco P, Pelco D

Upgrading Analogue PTZ Firmware

Upgrading the firmware on the HDZ Series Analogue PTZ Dome is typically a complicated procedure. If a firmware upgrade for your camera at a site is needed, contact Honeywell technical support at **1.800.323.4576** (North America only) for assistance. Refer to the back cover of this manual for international contact information.

4

Operation and Configuration

To operate and configure the HDZ Series Analogue PTZ dome camera, you will require a keyboard controller and monitor to connect to the PTZ dome. See *System Configuration on page 24* for an overview of the devices to connect to the HDZ Series PTZ dome.

See *Accessing the Main Menu on page 36* for information about opening the HDZ Series PTZ analogue dome OSD menus. See *Navigating OSD Menus on page 37* for more information about navigating the OSD menus.

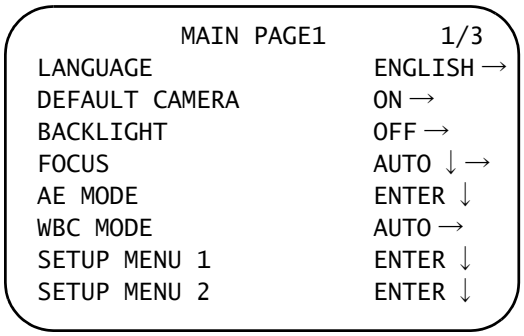
Included in this chapter:

- *Main Menu Page 1 Settings, page 51*
- *Setup Menu Page 1 Settings, page 56*
- *Setup Menu Page 2 Settings, page 59*
- *Main Menu Page 2 Settings, page 63*
- *Main Menu Page 3 Settings, page 74*

Main Menu Page 1 Settings

MAIN PAGE 1 is the first menu page that opens when you open the camera OSD menu. See the following sections for more information about changing settings in this menu.

Figure 4-1 Main Menu Page 1



Setting the Language

The HDZ Series camera supports multi-language OSD operation. The available languages include English, Japanese, Portuguese, Spanish, French, German, Italian, Polish, Russian, Traditional Chinese, Simplified Chinese, Turkish, Dutch, and Czech. You can set a language on the MAIN PAGE 1 (see *Figure 4-1*). Move the cursor to the **LANGUAGE** option and use the joystick or left/right arrow keys to select the language. The OSD will automatically change to the language you select. The default language is **ENGLISH**.

Setting the Default Camera

The **DEFAULT CAMERA** option (see *Figure 4-1*) is used to restore some camera settings back to their default setting. The settings that are affected by this option include: Backlight, Focus, AE, WBC, Image Inverse, Sharpness and Digital Zoom. Once any one of these items are modified from their default setting, the **DEFAULT CAMERA** option will become **OFF** automatically. Select **ON** for this item to revert to the default settings for the camera parameters listed above.

Setting the Backlight Compensation

The Backlight compensation function prevents the center object from being too dark in surroundings where excessive light is behind the object.

Move the cursor to the **BACKLIGHT** option and use the joystick or left/right arrow keys to select **ON** to activate the function (see *Figure 4-1*). The center object will be brightened in contrast to the edge of the picture (where a backlight would be most likely located).

After completing the Backlight setup, continue to set the focus and other relevant camera options.

Setting the Focus Mode and Options

The focus of the HDZ Series PTZ dome camera can be operated in two modes: Auto Focus mode and Manual Focus mode. See the following sections for more information about setting up the focus modes.

Auto Focus

There are three options available for the AF Mode, including NORMAL mode, Zoom Trigger (Z. TRIG.) mode and PTZ Trigger (PTZ TRIG) mode. The submenu of AF Mode is shown in *Figure 4-2*.

Figure 4-2 Auto Focus Mode

Normal Mode

In this mode, the camera will keep in focus automatically and continuously in any condition.

Zoom Trigger Mode

In this mode, auto focusing is activated at the time when the zoom value is changed. The camera will still auto focus once at the beginning of pan/tilt movement (no auto focusing during pan/tilt movement or when pan/tilt movement stops).

PTZ Trigger Mode

In this mode, auto focusing is triggered when the camera is controlled to pan, tilt or zoom.

EXIT+SAVE

Press **IRIS+** on this item to save the selected AF Mode.

Manual Focus

In this mode, users can adjust focus near/far by using the control keyboard's Focus Near/Far keys.

After completing focus setup, go back to the Main Page 1 (see *Figure 4-1*) and continue to set other relevant camera options.

Note The AF mode will be resumed after every boot.

Setting the Auto Exposure Mode Options

The exposure is the amount of light received by the image sensor and is determined by the width of the lens diaphragm opening (iris adjustment), the amount of exposure by the sensor (shutter speed) and other exposure parameters. With this item, users can define how the Auto Exposure (AE) function works for the camera.

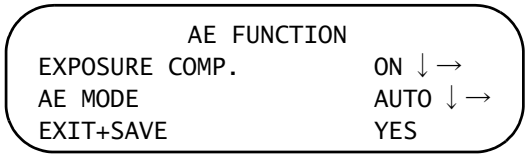
Setting the Exposure Compensation

If set to **ON**, the exposure value rages from **-10.5dB** to **10.5dB**. Select **OFF** to disable the function.

Setting the Auto Exposure Mode

Select the auto exposure mode for the camera and press IRIS+ to adjust the settings for the selected mode (see *Figure 4-3*).

Figure 4-3 Auto Exposure Mode Menu



AUTO

In this mode, the camera's BRIGHTNESS, SHUTTER SPEED, IRIS VALUE and GAIN VALUE (Auto Gain Control) control circuits work together automatically to achieve a consistent video output level. With AUTO selected, all options are fixed to AUTO and cannot be edited.

SHUTTER

With this option, the SHUTTER SPEED takes main control of exposure, and both IRIS VALUE and GAIN VALUE will function automatically in cooperation with shutter speed to achieve a consistent exposure output. The shutter speed ranges from **1**/**10000** to **1**/**60** (1/50 for PAL cameras).

IRIS

In this mode, the IRIS function takes main control of exposure. SHUTTER speed and GAIN VALUE will function automatically in cooperating with IRIS to get a consistent exposure output. The IRIS value is set to **f1.6** by default and can be adjusted from **F1.6** to **F28**.

MANUAL

In the Manual mode, users can manually adjust the SHUTTER SPEED (**1**/**10000** ~ **1**/**50** for PAL; **1**/**10000** ~ **1**/**60** for NTSC), IRIS VALUE (**F1.6** ~ **F28**), and GAIN VALUE (**-3dB** ~ **28dB**) for optimized video output.

Exiting AE Mode Sub Menu

Exit the AE MODE sub menu and go back to the Main Page 1 (see *Figure 4-1*) to continue to set the WBC MODE settings or other relevant camera options.

Setting the WBC Mode

A digital camera needs to find a reference color temperature, which is a way of measuring the quality of a light source, for calculating all of the other colors. The unit for measuring this ratio is in degree Kelvin (K). You can select one of the White Balance Control modes according to this condition. The following table shows the color temperature of some general light sources.

Table 4-1 Color Temperatures by Light Source

Light Sources	Color Temperature in K
Cloudy Sky	6,000 to 8,000
Noon Sun and Clear Sky	6,500

Table 4-1 Color Temperatures by Light Source (cont'd)

Light Sources	Color Temperature in K
Household Lighting	2,500 to 3,000
75-watt Bulb	2,820
Candle Flame	1,200 to 1,500

Setting Auto WBC

In this mode, white balance works within its color temperature range. This mode computes the white balance value output using color information from the entire screen. It outputs the proper value using the color temperature radiating from a black subject based on a range of values from 3,000 K to 7,500 K.

Setting Indoor WBC

This setting is the 3,200 K base mode, for indoor environments.

Setting Outdoor WBC

This setting is the 5,800 K base mode, for outdoor environments.

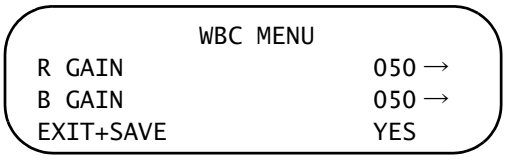
Setting ATW (Auto Tracing White Balance)

The HDZ Series PTZ dome camera takes out the signals in a screen in the range from 2,000 K to 10,000 K.

Setting Manual WBC

In this mode, users can change the White Balance value manually (see *Figure 4-4*). R gain and B gain are adjustable and range from **000** to **127**.

Figure 4-4 Manual WBC Mode

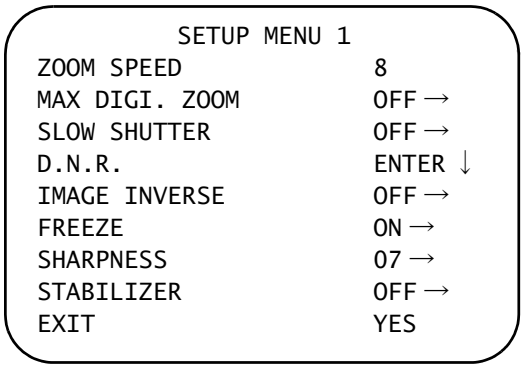


After completing WBC parameter settings, exit the WBC MODE menu and go back to the Main Page 1 to continue setting other relevant camera functions.

Setup Menu Page 1 Settings

In Setup Menu 1 (see *Figure 4-5*), users can set the Zoom Speed and choose whether to activate optional functions, including Digital Zoom, Slow Shutter, Noise Reduction, Image Inverse and Image Freeze. Refer to the following sections for more information on each function.

Figure 4-5 Setup Menu Page 1



Setting the Zoom Speed

This function is used to set the zoom speed of the HDZ Series Analogue PTZ Dome. The Zoom speed is fixed at **8**.

Setting the Digital Zoom

With this item, users can enable or disable the 12× Digital Zoom feature. If enabled, the Digital Zoom will be activated after the full Optical Zoom level has been reached.

Note The difference between optical and digital zoom is that optical zoom uses the lens within the camera to draw the image closer by zooming in or out to achieve the desired effect. Optical zoom retains the same quality and full resolution of the zoomed image.

On the other hand, Digital zoom takes a portion of an image and expands the partial image to the full size of the original image; therefore, the image quality will be reduced.

The Digital Zoom ratio is adjustable from **2x** to **12x**. The default setting is **OFF**.

Setting the Slow Shutter

The shutter speed setting determines how long the image sensor is exposed to light. To see a clear image in a dark environment, it is recommended you enable the Digital Slow Shutter function and select a slower shutter speed. Slow Shutter is set to **OFF** by default.

If the Digital Slow Shutter function is enabled, the HDZ Series Analogue PTZ Dome will automatically adjust the shutter speed based on the light condition of the camera installation environment. Digital Slow Shutters enables users to see objects in a dark environment below 0.1 lux.

Setting the Digital Noise Reduction

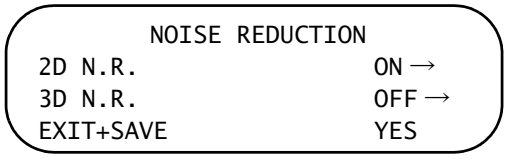
With 2D / 3D Digital Noise Reduction (DNR), the camera processor analyzes pixel by pixel and frame by frame to eliminate environmental noise so that the highest quality image can be produced, even in low light conditions. In comparison with 2D-DNR, 3D-DNR eliminates more noise from the image.

Note See *Recommended WDR and DNR Settings By Scene Type on page 94* for more information on the best scenes for enabling/disabling 2D/3D NR.

Select **D.N.R.** and press **IRIS+** to open the Noise Reduction submenu (see *Figure 4-6*). From this menu to can set 2D noise reduction **ON** or **OFF**. You can also set the 3D noise reduction to a setting from **1**–**5**, or **OFF** (default setting). Select **EXIT+SAVE** and press **IRIS+** to return to the previous menu.

Note 3D noise reduction is strong in reducing noise around static objects, but may cause trails behind fast moving objects in the video under low light.

Figure 4-6 D.N.R. Submenu



Enabling the Image Inverse

Users can select **IMAGE INVERSE** to **ON** to make the displayed image inversed vertically and horizontally (see *Figure 4-7*). Occasions to employ the function include conferences, demonstration, testing, etc. The default setting is **OFF**.

Application Users can see the displayed images, for example, when a dome is placed on a desktop in a conference room (as shown in *Figure 4-7*).

Figure 4-7 Image Inverse Examples

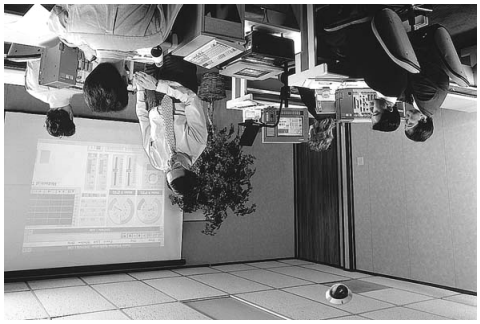


Image Inverse Off

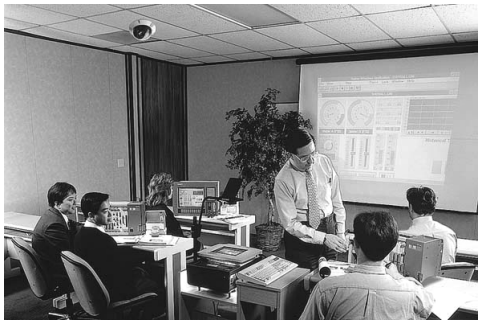


Image Inverse On

Enabling the Freeze Option

The Freeze function allows the camera to hold the current image while the camera is moving between preset positions such as in a PRESET (see *Setting Up a Preset Position on page 65*) or PRESET TOUR (see *Setting Up a Preset Tour on page 67*) function. For example, when the Analogue PTZ Dome is manipulated to run from point A to point B, and the Freeze function is enabled, the first view that users would see is point A. Then the next view would directly change to point B without displaying the moving path in between.

Setting the Sharpness

Under the Sharpness setup menu, users can adjust enhancement of the edges of objects in the picture.

There are 16 levels of sharpness adjustments. The options range from **01** to **16**. The 01 setting represents *no enhancement*. When shooting text, this function could make it sharp.

Enabling the Image Stabilizer

With the Image Stabilizer Function, the HDZ Series Analogue PTZ Dome can capture images that would otherwise be blurred due to the vibration.

Select **ON** to turn on the Stabilizer. The default setting is **OFF**.

Note If the image stabilizer function is turned on, it will also set the WDR function to OFF, Digital Slow Shutter to no function and will limit the Digital Zoom capability.

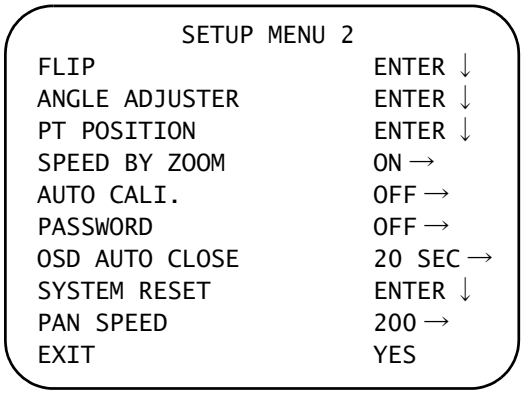
Exiting the Setup Menu 1

Exit the SETUP MENU 1 and go back to the MAIN PAGE 1 to continue setting other camera functions.

Setup Menu Page 2 Settings

In Setup Menu 2 (see *Figure 4-8*), users can set the Flip, Angle Adjuster and PT Position settings, and choose whether to activate optional functions, including Speed by Zoom, Auto Calibration, Password, OSD Auto Closing and System Reset. Refer to the following sections for more information on each function.

Figure 4-8 Setup Menu Page 2



Enabling the Image Flip Option

Users can continuously track an object when it passes under the HDZ Series Analogue PTZ Dome by changing the **FLIP** setting to **IMAGE** (digital flip) or **M.E.** (mechanical flip).

Figure 4-9 Flip Setting Options

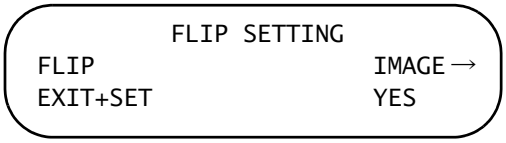


IMAGE (Digital Flip)

IMAGE represents a digital image flip, which enables users to keep tracking objects seamlessly. Under this mode, almost no delay occurs when the camera flips, as compared with the M.E. mode image flip.

Note The Privacy Mask function will be automatically disabled if the Image Flip function is enabled. The message, `MASK WILL BE SET OFF`, will be shown on the screen.

M.E. (Mechanical Flip)

M.E. is a standard mechanical PTZ operation. As the HDZ Series Camera tilts to the maximum angle, it will pan 180°, and then continue tilting to keep tracking objects.

Note Flip setting is manual-controlled only. If a Preset or a point for other function (ex. Preset Tour) is set in the position that can only be reached through FLIP motion, when Flip is off, the position cannot be reached anymore.

OFF (No Image Flip)

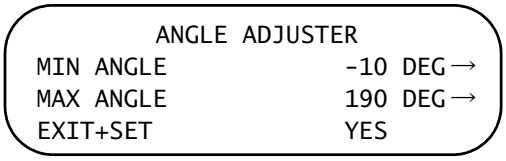
Select this item to disable the flip function.

Note To make the HDZ Series Analogue PTZ Dome tilt between a specific range, such as -10° to +100° or -10° to +190°, please go to the ANGLE ADJUSTER function (see *Setting the Angle Adjuster on page 60*) to set the angle range of tilt. The ANGLE ADJUSTER options will change depending on which Flip mode is selected. Otherwise, the dome will tilt up to 90° as the default setting.

Setting the Angle Adjuster

The item is for adjusting the angle range of the tilt motion (see *Figure 4-10*). The Range of the tilt motion varies in different FLIP modes. The angle ranges from -10° to +100° in the M.E. FLIP and FLIP OFF modes, and from -10° to +190° in the IMAGE FLIP mode.

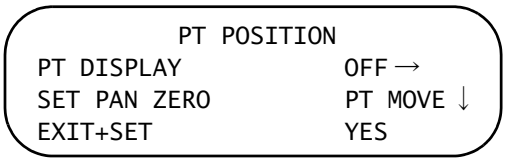
Figure 4-10 Angle Adjuster Options



Setting the PT Position

PT Position can display the Pan/Tilt position of the Analogue PTZ Dome on the screen. See *On-Screen Display Overview on page 37* for the on-screen location the PT position is displayed.

Figure 4-11 PT Position Options



Setting PT Display

Turn this item to **ON** to display the pan/tilt position on the screen. The display format will be PXXX, TYY.

Setting Pan to Zero

By using the **SET PAN ZERO** function, users can set the north direction as coordinate zero.

The display will show eight different directions including N, E, S, W, NE, SE, SW, NW depending on the closest direction the Analogue PTZ Dome faces. The PAN range is from 0° to 359°, and the TILT range is from 10° to -90°. After lower than -90°, the PAN degree will be automatically added 180°.

Press **TO SAVE** to save the pan zero setting.

Exiting the PT Position Menu

Exit the PT POSITION and go back to SETUP MENU 2 and carry on setting other camera functions.

Setting the Speed By Zoom

If Speed By Zoom is set to **ON**, the pan/tilt speed will be automatically adjusted by an internal algorithm when zooming. A larger zoom ratio leads to a lower rotating speed.

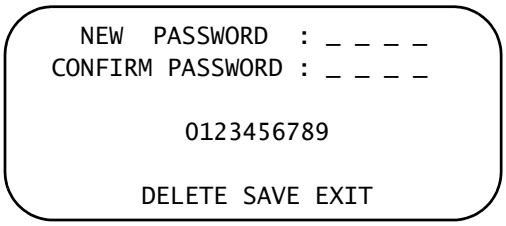
Setting the Auto Calibration

There is one horizontal point and one vertical infrared rays check point in each dome. During installation or maintenance, the Analogue PTZ Dome's position may be moved. Therefore, the relative distance between the original set point and the check point might have changed. If the Auto Calibration function is enabled, the HDZ Series Camera will automatically detect the matter and reset the horizontal point back to its original position.

Setting the Password

The administrator can activate an OSD Password for security concerns. Once the function is enabled, users are required to enter the password every time they access the OSD menu. The Password setting menu is shown in *Figure 4-12*.

Figure 4-12 Password Sub Menu



Use the following procedure to set the password:

1. Choose a number for the password with direction keys and then press the **IRIS+** key (**ENTER**) to input that number in the **NEW PASSWORD** field.

   For example: **0 ➤ IRIS+ ➤ 1 ➤ IRIS+ ➤ 2 ➤ IRIS+ ➤ 3 ➤ IRIS+** gives you the password **0123**.
2. In the **CONFIRM PASSWORD** line, enter the same password again to confirm the setting.
3. Move the cursor to **SAVE** and press **IRIS+** to save the setting. This will log you out of the OSD menu.

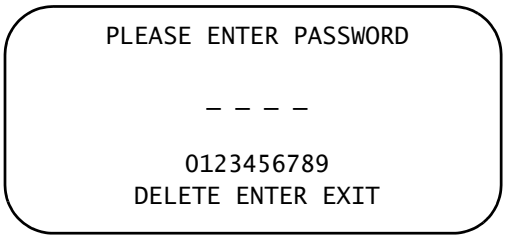
Note If needed, move the cursor to **EXIT** and press **IRIS+** to exit the password setting page without saving.

To delete an entered password character, move the cursor to **DELETE** and press **IRIS+** to delete the previously entered character.

Using the OSD Password to Login

If OSD Password function is enabled, when you enter the OSD menu, the password request message will be displayed as shown in *Figure 4-13*. Please enter the password, select **ENTER**, and press **IRIS+** to access the OSD main menu.

Figure 4-13 Enter Password Screen



Note When the Password Function on, please enter the Master Passport if the manually entered password has been forgotten.

Master Password: **9527**.

Setting the OSD to Close Automatically

Users can specify the duration for OSD menu to stay open before automatically closing after a period of inactivity. Time selection ranges from **10** to **30** seconds. To keep the OSD menu on the screen until manually exited, set this option to **OFF**.

Resetting the System

Two types of system reset can be implemented under this option:

System Reset

Select this function to reboot the system. Press **IRIS+** and the system reboot will start.

Default System

This function allows users to restore the camera to its factory default settings. Press **IRIS+** and the reset will start.

Setting the Maximum Pan Speed

Users can specify the maximum pan speed for the camera with this option. Options are **200**°/s, **100**°/s, and **50**°/s. The default setting is **200**.

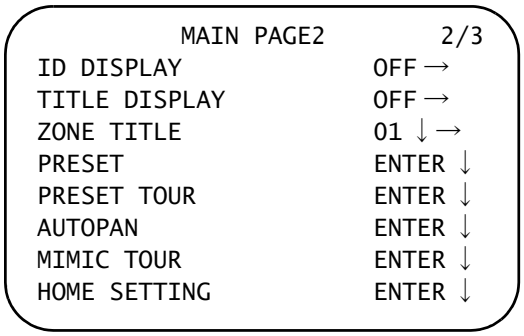
Exiting the Setup Menu 2

Exit the SETUP MENU 2 and go back to the MAIN PAGE 1. Go to the MAIN PAGE 2 to carry on setting other Analogue PTZ Dome functions.

Main Menu Page 2 Settings

MAIN PAGE 2 is the second menu page that opens when users scroll down from the MAIN PAGE 1. See the following sections for more information about changing settings in this menu.

Figure 4-14 Main Menu Page 2



Setting the ID Display

If required, you can set the HDZ Series PTZ camera to display the ID number of the dome on the screen to aid in identifying domes when monitoring video.

1. Press the direction key down to go from MAIN MENU page 1 to MAIN MENU page 2.
2. The **ID DISPLAY** menu item will be shown at the top of the screen.
3. Set **ID DISPLAY** to **ON** to enable the dome ID to display in the bottom right corner of the screen (see #8 in *Figure 3-3*). Set **ID DISPLAY** to **OFF** to disable the dome ID.

Setting Up the Zone Title Display

HDZ Series users have the option to name a viewing area (zone) viewed with the PTZ camera, so that the title will be displayed on-screen for easy recognition. Up to 16 zone titles can be set for different PTZ positions (zones).

The title display option must be enabled (see *Enabling the Title Display, page 64*), and at least one title to be displayed must be input (see *Entering a Zone Title Name, page 64*).

Enabling the Title Display

1. Press the joystick or direction key down to go from MAIN MENU page 1 to MAIN MENU page 2.
2. Set **TITLE DISPLAY** to **ON** to enable displaying the title on-screen when viewing video from the camera.

   Set **TITLE DISPLAY** to **OFF** to disable the on-screen title display.

Entering a Zone Title Name

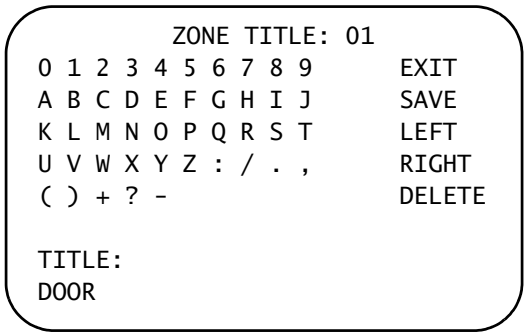
Up to 16 zone titles can be set. Each zone title has a maximum of 20 characters.

Follow the steps in this procedure to set a camera zone title:

1. Use the pan, tilt and zoom controls to operate the camera and move it to view the area (zone) that you want to set the title for.
2. Turn on the OSD, and press the joystick or direction key down to go to MAIN PAGE 2.

3. Select the **ZONE TITLE** option.
4. Select a number to represent the current viewing area (zone).
5. Press the **IRIS+** key (**ENTER**) on the keyboard to open the title editing page (see *Figure 4-15*)

Figure 4-15 Camera Title Editing



6. Choose a character with the joystick or direction keys and then press the **IRIS+** key (**ENTER**) to input the character. For example:

   Select **D ➤ IRIS+ ➤ O ➤ IRIS+ ➤ O ➤ IRIS+ ➤ R ➤ IRIS+** to enter the title **DOOR**.
7. To delete a character, move the cursor to the **LEFT** or **RIGHT** command and press **IRIS+** until you have selected a character in the entry field to be deleted. Select **DELETE** and press **IRIS+** to delete the selected character.
8. When the title is complete, move the cursor to **SAVE** and press **IRIS+**.

   The new title will now display when viewing the zone it was set for (see #7 in *Figure 3-3*).

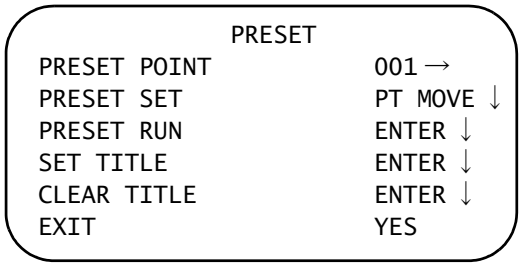
Setting Up a Preset Position

Programming a Preset

A total of 256 preset positions can be set for your HDZ Series Analogue PTZ Dome. Follow the steps below to program a preset position:

1. Select **PRESET** in MAIN PAGE 2 and press **IRIS+**. The PRESET menu will open (see *Figure 4-16*).

Figure 4-16 Preset Menu



2. Use the joystick or press the right/left keys on the keyboard to select a preset number (001 represents preset point 1, 002 represents preset point 2, and so on).

3. Select **PRESET SET** and press the **IRIS+** key (**ENTER**) on the keyboard and then move the HDZ Series PTZ camera to a targeted shooting area/preset position.
4. Press the **IRIS+** key again to save the defined preset position.

Note Once a preset position is set up, users can move the cursor to the next item to run the preset.

Running a Programmed Preset

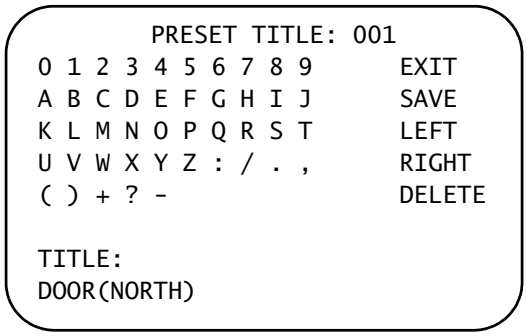
Select **PRESET RUN** and press the **IRIS+** key (**ENTER**). The camera will go to the appointed preset position. To run another defined preset, simply press the right/left keys on the keyboard or use the joystick to select the preset position that you want to go to in the **PRESET POINT** field. Then select **PRESET RUN** and press the **IRIS+** key (**ENTER**) again.

Note Users can also go to Preset positions through a keyboard/controller. Please refer to the control keyboard's documentation for more information.

Naming a Preset

1. Select the preset to name in the **PRESET POINT** field.
2. Use the joystick or direction keys to move the cursor to **SET TITLE** and press **IRIS+** to open the PRESET TITLE screen (see *Figure 4-17*).

Figure 4-17 Preset Title Editing



3. Choose a character with the joystick or direction keys and then press the **IRIS+** key (**ENTER**) to input the character. For example:

   Select **D ➤ IRIS+ ➤ O ➤ IRIS+ ➤ O ➤ IRIS+ ➤ R ➤ IRIS+ ➤ (➤ IRIS+ ➤ N ➤ IRIS+ ➤ O ➤ IRIS+ ➤ R ➤ IRIS+ ➤ T ➤ IRIS+ ➤ H ➤ IRIS+ ➤) ➤ IRIS+** to enter the title **DOOR(NORTH)**.
4. To delete a character, move the cursor to the **LEFT** or **RIGHT** command and press **IRIS+** until you have selected a character in the entry field to be deleted. Select **DELETE** and press **IRIS+** to delete the selected character.

5. When the title is complete, move the cursor to **SAVE** and press **IRIS+**.
6. The new title will now display when viewing the preset it was set for.

Deleting a Preset Title

To delete the title for a preset point, select the preset to delete the title of in the **PRESET POINT** field, then move the cursor to **CLEAR TITLE** and press **IRIS+**.

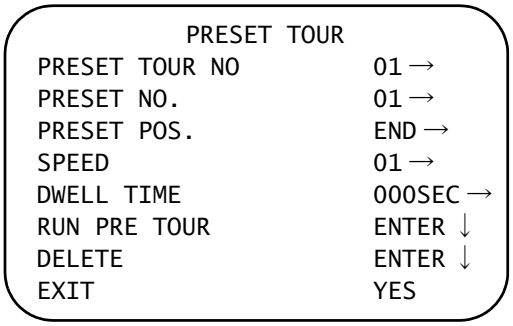
Exiting the Preset Menu

Exit the PRESET menu and go back to the MAIN PAGE 2 to carry on setup of the camera.

Setting Up a Preset Tour

The preset tour feature executes a programmed path of the pan, tilt, zoom and focus functions for the camera in a certain sequence. Before setting up this function, users must have pre-defined at least two preset positions (see *Setting Up a Preset Position on page 65*).

Figure 4-18 Preset Tour Menu



Selecting the Preset Tour Number

There are 16 sets of preset tours built in to the HDZ Series Analogue PTZ Dome. Use the joystick or LEFT/RIGHT direction keys to select a tour number first, before setting its preset numbers (see *Figure 4-18*).

Selecting a Preset Number

Up to 32 preset positions can be setup for each Preset Tour. The Preset Numbers represent the order of the preset positions that the HDZ Series Camera will automatically run through. The preset position programmed as preset number 1 will be the first position of the tour, followed by number 2, 3, and so on. Use the joystick or LEFT/RIGHT direction keys to select a Preset Number to program.

The next setup items, including **PRESET POSITION**, **SPEED** and **DWELL TIME**, will influence how the camera runs through each selected preset point.

Setting the Preset Position

Users can assign a specific preset position to the selected Preset Number with this item (see *Figure 4-18*). Use the joystick or LEFT/RIGHT direction keys to select a preset from **1**~**255** or **END**. **END** is the selection used for the Preset Position following the last Preset Position you want programmed when the amount of preset numbers will be less than 32 (see *Selecting a Preset Number on page 67*).

Note If you are not using all 32 Preset Numbers in the tour, please set the point following the last required Preset Number as **END** (for **PRESET POSITION**) so that the preset tour can function properly. For example, if a user intends to set a Preset Tour with 5 Preset Positions, it is required to set the **PRESET POSITION** of Preset Number **06** as **END**.

Setting the Preset Tour Speed

Users can set the pan/tilt speed of the HDZ Series Analogue PTZ Dome Camera from the selected Preset Position to the next point in the tour. Users can set speeds that range from **1** (slowest) to **15** (fastest). Within this range, the PAN speed varies from 10 to 400 (degrees/sec.), and the TILT speed varies from 8 to 400 (degrees/sec.).

Setting the Preset Tour Dwell Time

The **DWELL TIME** is the duration of time that the Analogue PTZ Dome will stay at the Preset Position. The available dwell time range is from **000** to **127** seconds. The HDZ Series Camera will go to the next Preset Position after the dwell time expires. If the dwell time is set to **000**, the HDZ Series Camera will stay at the current position for less than 1 second and then move to the next position.

Running a Preset Tour

Users can command the HDZ Series Analogue PTZ Dome to run the selected Preset Tour manually. Select the **PRESET TOUR NO** to run, move the cursor to **RUN PRE TOUR** and press the **IRIS+** key (**ENTER**) to execute the selected Preset Tour (see *Selecting the Preset Tour Number on page 67* for more information).

Note Users can also execute the Preset Tour function through a keyboard/controller. Please refer to the keyboard's documentation for more information about executing PTZ commands.

Deleting a Preset Tour

Users can command the HDZ Series Analogue PTZ Dome to delete the selected Preset Tour. Move the cursor to **DELETE** and press the **IRIS+** key (**ENTER**) to delete the selected Preset Tour (see *Selecting the Preset Tour Number on page 67* for more information on selecting the Preset Tour to be deleted).

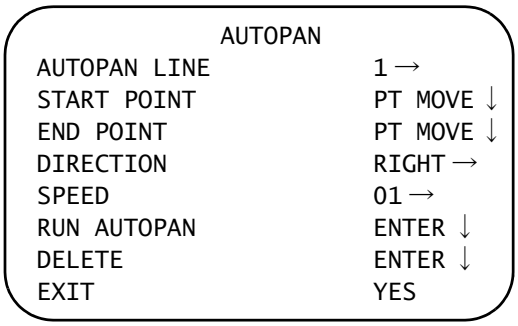
Exiting the Preset Tour Menu

Select the **EXIT** item to exit the PRESET TOUR menu and go back to the MAIN PAGE 2 to carry on setup of the HDZ Series camera.

Setting Up an Autopan Path

An Autopan is the motion of scanning an area horizontally, panning back and forth between a start and end point so that the Analogue PTZ Dome can monitor a horizontal view. The parameters are listed in the following sections.

Figure 4-19 Autopan Menu



Selecting an Autopan Line

There are four sets of Autopan lines built in to the HDZ Series Analogue PTZ Dome. Users can choose an Autopan line to execute by pressing LEFT/RIGHT direction keys or using the joystick (see *Figure 4-19*).

Setting the Autopan Start and End Points

Follow the procedure below to set the starting position of the AUTOPAN path:

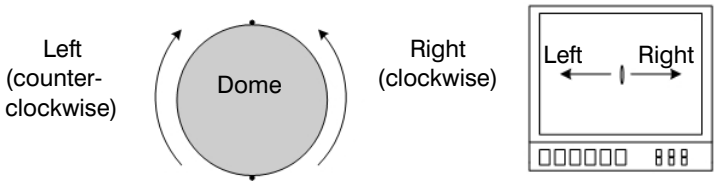
1. Move the cursor to **START POINT** and press **IRIS+** while **PT MOVE** is flashing. The item will automatically change to display **TO SAVE**.
2. Move the dome to a desired starting position using the PTZ controls and press **IRIS+** to save the position as the starting point. The cursor will automatically move to the **END POINT** line. The end point must be set to complete the autopan programming.
3. Move the dome to a desired ending position using the PTZ controls and press **IRIS+** to save the position as the ending point.

Note The tilt and zoom values of the start and end points will be recorded and fixed for the selected Autopan line.

Setting the Autopan Direction

The **DIRECTION** setting of the HDZ Series Camera sets the direction the camera will pan. The dome will start to pan clockwise from the start point to the end point if your selection is **RIGHT**, and then return to the start point. The dome will start to pan counter-clockwise from the start point to the end point if your selection is **LEFT**, and then return to the start point. Refer to *Figure 4-20* below.

Figure 4-20 Pan Direction in Relation to Dome Movement



Setting the Autopan Speed

The **SPEED** option is used to define the rotation speed of the Analogue PTZ Dome while running an autopan path. The speed is adjustable from **1** to **4** (10 ~ 45 degree/sec.).

Running an Autopan Path

After all settings related to the Autopan path are completed, select **RUN AUTOPAN** to execute the selected Autopan. Press the **IRIS+** key (**ENTER**) to run the selected Autopan line (see *Selecting an Autopan Line on page 69* for more information about selecting the Autopan to run).

Note Users can also execute the Autopan path through a keyboard/controller. Please refer to the keyboard's documentation for more information about executing PTZ keyboard commands.

Deleting an Autopan Path

Users can command the HDZ Series Analogue PTZ Dome to delete the selected Autopan Line. Move the cursor to **DELETE** and press the **IRIS+** key (**ENTER**) to delete the selected Autopan Line (see *Selecting an Autopan Line on page 69* for more information on selecting the Autopan to be deleted).

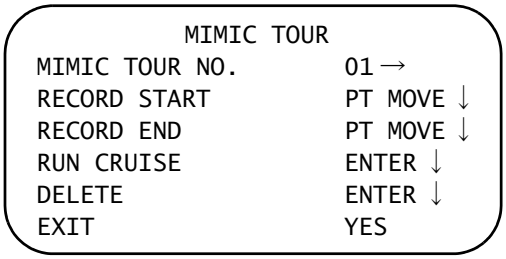
Exiting the Autopan Menu

Exit the AUTOPAN setup menu and go back to the MAIN PAGE 2 to carry on setup of the camera.

Setting Up a Mimic Tour

A Mimic Tour is a route formulated by manual operation of the HDZ Series Analogue PTZ Dome. The user runs through a path by adjusting pan, tilt and zoom parameters, which will be stored by the camera and can be recalled to execute at any time.

Figure 4-21 Mimic Tour Menu



Selecting a Mimic Tour

Up to 16 sets of Mimic Tours can be created for an HDZ Series camera. Use the joystick or LEFT/RIGHT direction keys to select a Mimic Tour to program. Follow the steps in *Recording a Mimic Tour, page 71*, to start programming a Mimic Tour route.

Recording a Mimic Tour

Follow the procedure below to record the Mimic Tour path:

1. Navigate to the **MIMIC TOUR** menu (see *Figure 4-21*), select the **MIMIC TOUR NO** to program (see *Selecting a Mimic Tour, page 71*), move the cursor to **RECORD START** and press **IRIS+**, then move the PTZ camera to the starting point for the tour and press **IRIS+** again.

> **Note** For some protocols, users may need to move the camera to the desired Mimic Tour starting point before entering the OSD menus.

2. Use the joystick on the control device to start building the tour route. The percentage of the memory buffer used will be displayed on the screen.

> **Note** Beware of the memory size percentage when building a Mimic Tour route. Once the buffer percentage reaches 100%, recording of the tour will stop.

3. The cursor moves to **RECORD END** when you are building the tour route. When you have finished plotting the tour, press **IRIS+** to save the tour.

Running a Mimic Tour

After tour setting is completed, press the **IRIS+** key to run the selected Mimic Tour (see *Selecting a Mimic Tour on page 71* for more information on selecting a tour to run).

Note Users can also execute the Mimic Tour through a keyboard/controller. Please refer to the keyboard's documentation for more information about executing PTZ commands.

Deleting a Mimic Tour

Users can command the HDZ Series Analogue PTZ Dome to delete the selected Mimic Tour. Move the cursor to **DELETE** and press the **IRIS+** key (**ENTER**) to delete the selected Mimic Tour (see *Selecting a Mimic Tour on page 71* for more information on selecting the Mimic Tour to be deleted).

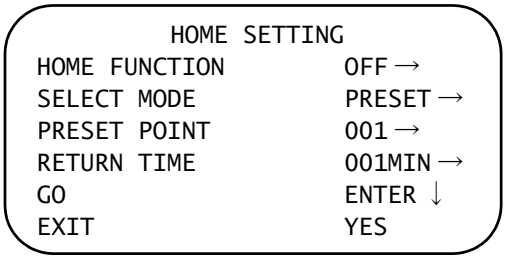
Exiting the Mimic Tour Menu

Exit the MIMIC TOUR setup menu and go back to the MAIN PAGE 2 to carry on setup of the camera.

Configuring the Home Setting

Users are able to set a Home Setting operation mode to ensure constant monitoring. If the HDZ Series Camera idles for a set period of time, the selected function, called the **HOME** function, will be automatically activated. The **HOME** function allows constant and accurate monitoring to avoid the Analogue PTZ Dome idling or missing events.

Figure 4-22 Home Setting Menu



Enabling the Home Function

This option is used to enable or disable the **HOME** function. Use the joystick or LEFT/RIGHT direction keys to change the setting.

Selecting the Home Setting Mode

Select the type of action that the HDZ Series Analogue PTZ Dome should execute when the HOME function is enabled and the **RETURN TIME** expires. The mode options include **AUTOPAN**, **PRESET TOUR**, **MIMIC TOUR** and **PRESET** (default). Use the joystick or LEFT/RIGHT direction keys to change the setting, and the options below will change to correspond with your selection.

Selecting a Preset Point

PRESET must be selected as the **SELECT MODE** for this option to be available (see *Selecting the Home Setting Mode on page 73*). Select a preset point where the Analogue PTZ Dome should go after the **RETURN TIME** has elapsed (see *Setting the Return Time on page 74* for more information on enabling and setting the **RETURN TIME**). The preset point(s) should be setup in the PRESET setup menu or through the keyboard prior to enabling the HOME function (see *Setting Up a Preset Position on page 65* for more information on setting up preset points).

Selecting a Preset Tour

PRESET TOUR (**P. TOUR**) must be selected as the **SELECT MODE** for this option to be available (see *Selecting the Home Setting Mode on page 73*). Select a preset tour that the HDZ Series Analogue PTZ Dome should execute after the **RETURN TIME** has elapsed (see *Setting the Return Time on page 74* for more information on enabling and setting the **RETURN TIME**). The preset tour(s) should be defined in the PRESET TOUR setup menu or through the keyboard prior to enabling the HOME function (see *Setting Up a Preset Tour on page 67* for more information on setting up preset tours).

Selecting an Autopan Line

AUTOPAN must be selected as the **SELECT MODE** for this option to be available (see *Selecting the Home Setting Mode on page 73*). Select a autopan path that the HDZ Series Analogue PTZ Dome should execute after the **RETURN TIME** has elapsed (see *Setting the Return Time on page 74* for more information on enabling and setting the **RETURN TIME**). The autopan path(s) should be defined in the AUTOPAN setup menu or through the keyboard prior to enabling the HOME function (see *Setting Up an Autopan Path on page 69* for more information on setting up autopan paths).

Selecting a Mimic Tour

MIMIC TOUR (**M. TOUR**) must be selected as the **SELECT MODE** for this option to be available (see *Selecting the Home Setting Mode on page 73*). Select a mimic tour that the HDZ Series Analogue PTZ Dome should execute after the **RETURN TIME** has elapsed (see *Setting the Return Time on page 74* for more information on enabling and setting the **RETURN TIME**). The mimic tour(s) should be defined in the MIMIC TOUR setup menu or through the keyboard prior to enabling the HOME function (see *Setting Up a Mimic Tour on page 71* for more information on setting up a mimic tour).

Setting the Return Time

The HDZ Series Analogue PTZ Dome starts to count down the **RETURN TIME** when the dome idles, and then will execute the **SELECT MODE** function when the return time elapses. Select the **RETURN TIME** that is best for your dome installation (time ranges from 1 to 128 minutes).

Executing Home Function (GO)

If the HOME function is enabled and configured, users can execute the HOME function by selecting **GO** and pressing **IRIS+**.

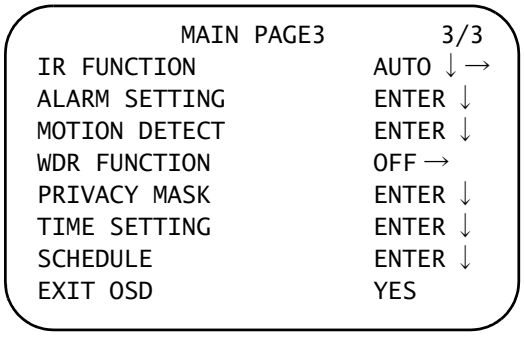
Exiting the Home Menu

Exit the HOME setup menu and go to the MAIN PAGE 3 to carry on setup of the camera.

Main Menu Page 3 Settings

MAIN PAGE 3 is the third menu page (see *Figure 4-23*) that opens when users scroll down from the MAIN PAGE 2. See the following sections for more information about changing settings in this menu.

Figure 4-23 Main Menu Page 3



Setting the IR Function (Removable IR Cut Filter)

With the IR cut filter, the HDZ Series Dome Camera can capture clear images at night time or in low light conditions. During the day time, the IR cut filter will be on to block the infrared light for a clear image. During the night time, the IR cut filter will be removed to let the camera catch infrared light, and the displayed images will become black and white.

Setting Auto IR Function

With the Auto IR Function, the Internal circuit will automatically decide the occasion to remove the IR cut filter according to the value of light condition, as calculated by the internal light algorithm. The Auto THRESHOLD options include **LOW**, **MID** and **HI**. **LOW** indicates a higher sensitivity and can improve the reliability of the lens so that it is easier to switch to Day mode and relatively difficult to change into Night mode (that is, ambient lighting must be very low to switch to night mode). **HI** indicates that it is easier to switch to Night mode and difficult to change into Day mode (that is, ambient lighting must be very high to switch to day mode).

Setting Manual IR Function

IR MANUAL ON

Select **IR MANUAL ON** to remove the IR cut filter. The camera will be in B/W (Night) mode until it is manually changed.

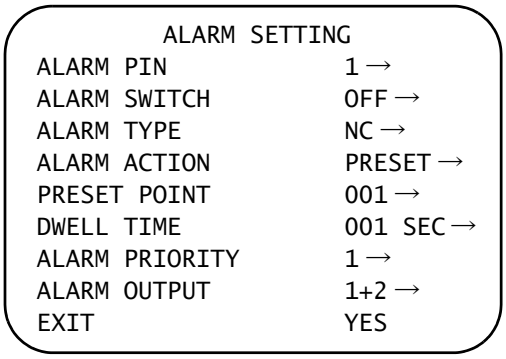
IR MANUAL OFF

Select **IR MANUAL OFF** to attach the IR cut filter. The camera will be in Color (Day) mode, disabling the IR function, until it is manually changed.

Configuring the Alarm Setting

The HDZ Series Analogue PTZ Dome provides four alarm inputs and two alarm outputs (N.O. or N.C) to connect alarm devices. With this function, the Dome Camera can cooperate with the alarm system to capture event images. For wiring, please refer to the installation guide and/or qualified service personnel. Adjustable alarm parameters are described in the following sections.

Figure 4-24 Alarm Setting Menu



Selecting an Alarm Pin

The HDZ Series dome provides 4 alarm inputs and 2 output (N.O. or N.C.). Use the **ALARM PIN** field to select the alarm input which you want to set its alarm-related parameters. Set the selected alarm pin's alarm-related parameters in the Alarm Setting menu. For alarm pin definitions, refer to *Connecting Alarm Inputs/Outputs on page 29*.

Note If two or more alarm pins are triggered at the same time, the smaller alarm pin number will have higher priority and be handled while other alarms are ignored (see *Setting the Alarm Priority on page 77*). For example, if Alarm-1 and Alarm-3 are triggered simultaneously, only Alarm-1 will actually be handled.

Enabling/Disabling the Alarm Switch

The **ALARM SWITCH** field is used to enable or disable the selected alarm pin function. Use the joystick or left/right direction keys on the control keyboard to change this setting.

Setting the Alarm Type

There are two alarm types: Normally Open (**NO**) and Normally Close (**NC**), which are illustrated in *Figure 4-25*. Use the joystick or left/right direction keys to select an alarm type that corresponds with the alarm application you have connected.

Figure 4-25 Examples of Alarm Types

Selecting the Alarm Action

Select the type of action that the HDZ Series Analogue PTZ Dome should execute when the selected alarm is triggered. The mode options include **AUTOPAN**, **PRESET TOUR**, **MIMIC TOUR** and **PRESET** (default). Use the joystick or LEFT/RIGHT direction keys to change the setting, and the options below will change to correspond with your selection. Additionally, when an alarm is triggered, there will be a flash warning notice, **ALARM**, displayed in the upper right corner of the screen.

Note When dwell time (setting: 1~127 seconds, or ALWAYS) has elapsed, the HDZ Series camera will go back to the previous status before the alarm was triggered.

Selecting a Preset Point

PRESET must be selected as the **ALARM ACTION** for this option to be available (see *Selecting the Alarm Action on page 76*). Select a preset point where the Analogue PTZ Dome should go after the selected alarm is triggered. The preset point(s) should be setup in the PRESET setup menu or through the keyboard prior to using with the Alarm function (see *Setting Up a Preset Position on page 65* for more information on setting up preset points).

Selecting a Preset Tour

PRESET TOUR (**P. TOUR**) must be selected as the **ALARM ACTION** for this option to be available (see *Selecting the Alarm Action on page 76*). Select a preset tour that the Analogue PTZ Dome should execute when the selected alarm is triggered. The preset tour(s) should be defined in the Preset Tour setup menu or through the keyboard prior to using with the Alarm function (see *Setting Up a Preset Tour on page 67*).

Selecting an Autopan Line

AUTOPAN must be selected as the **ALARM ACTION** for this option to be available (see *Selecting the Alarm Action on page 76*). Select a autopan path that the HDZ Series Analogue PTZ Dome should execute when the selected alarm is triggered. The autopan path(s) should be defined in the Autopan setup menu or through the keyboard prior to using the Alarm function (see *Setting Up an Autopan Path on page 69* for more information on setting up autopan paths).

Selecting a Mimic Tour

MIMIC TOUR (**M. TOUR**) must be selected as the **ALARM ACTION** for this option to be available (see *Selecting the Alarm Action on page 76*). Select a mimic tour that the HDZ Series Analogue PTZ Dome should execute when the selected alarm is triggered. The mimic tour(s) should be defined in the Mimic Tour setup menu or through the keyboard prior to using the Alarm function (see *Setting Up a Mimic Tour on page 71* for more information on setting up a mimic tour).

Setting the Dwell Time

The **DWELL TIME** is the duration to be applied when executing the alarm action. If the **PRESET** mode is selected, the HDZ Series Analogue PTZ Dome will go to the selected preset position and stay there for a user-defined period of time (**1~127** seconds/**Always**) when alarm takes place, or until the alarm condition is released or users rotate the joystick to change the status of the Dome Camera.

If other modes (**PRESET TOUR**/**AUTOPAN**/**MIMIC TOUR**) have been selected, the camera will keep executing the selected mode (**DWELL TIME** is set to **ALWAYS** and cannot be changed) until the alarm condition is released or users rotate the joystick to change the status of the Dome Camera.

Note The dwell time is only adjustable when **PRESET** is selected as the alarm action. When the dwell time is up, the HDZ Series Dome Camera will go back to its trigger position and recheck the alarm pin status.

Setting the Alarm Priority

Set the alarm priority from **1** to **4** for each alarm pin. If two or more alarms are triggered at the same time, smaller alarm priority number will have higher priority of being handled. The default alarm priority is **1** for Alarm Pin 1, **2** for Alarm Pin 2, and so on.

Configuring the Alarm Output

There are two alarm outputs for the HDZ Series Camera. Users can set **1**, **2**, **1+2** or **OFF** to trigger the alarm output devices (such as a siren or flashing light) when the alarm is triggered.

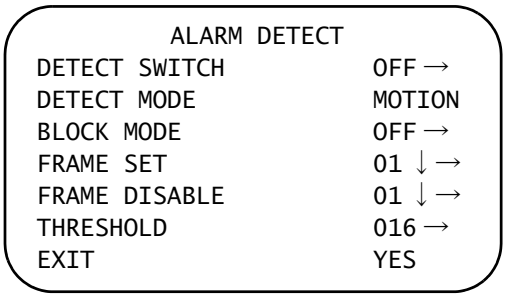
Exiting the Alarm Setting Menu

Exit the **ALARM SETTING** menu and go back to the **MAIN PAGE 3** to carry on setup of other relevant camera options.

Setting the Motion Detect Function

When the Motion Detect function is activated (see *Figure 4-26*), the camera will detect movement within a monitoring area and then automatically send an alarm signal if movement is detected. There will be a flashing warning notice, **MOTION**, displayed in the upper left corner of the screen.

Figure 4-26 Alarm Detect Menu



Setting the Detect Switch

Select **ON** or **OFF** in this field to enable or disable the **MOTION DETECT** function.

Setting the Detect Mode

MOTION is the only detect mode available to select with your HDZ Series Analogue camera. Motion Detection function allow detecting suspicious motion and triggering alarms when motion volume in the detected area reaches/exceeds the determined sensitivity threshold value. See *Figure 4-26* for the fields of the Alarm Detect menu.

Setting the Block Mode

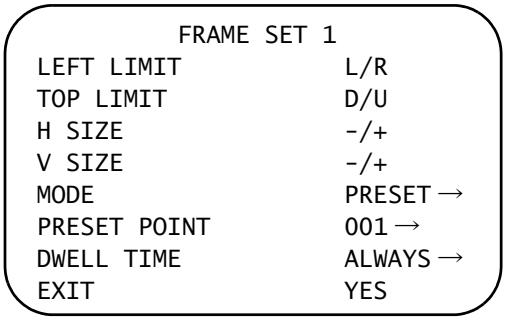
In Motion Detect mode, users can set Block Mode as **ON** or **OFF**. When **BLOCK MODE** is turned on, if there are any variations (caused by intrusion, for example) in the sections of the monitoring image, the affected parts will be dynamically highlighted.

Setting the Motion Frame

In a monitored field, users can define specific areas as motion detection target zones. Up to four frames can be set as motion detection target zones. Please refer to the instructions as follows to configure parameters for each motion detection zone, called a *Frame*. When motion is detected within a defined frame, a flash warning notice, **MOTION**, will display in the upper left corner of the screen. A set frame is independent of the pan/tilt/zoom coordinates (unlike privacy masks).

A total of four frames can be set. Select a frame using the right/left keys on the keyboard, and press the **IRIS+** key to enter the frame's submenu, as shown in *Figure 4-27*, below.

Figure 4-27 Frame Set Menu



LEFT LIMIT

Move the frame right/left using the joystick or right/left keys on the keyboard.

TOP LIMIT

Shift the frame up/down using the joystick or right/left keys on the keyboard.

H/V SIZE

Adjust the frame size by changing the **H SIZE**/**V SIZE** value using the right/left keys on the keyboard.

MODE

Assign a trigger action for a motion detection frame. Options include **PRESET**, **PRESET TOUR**, **AUTOPAN** and **MIMIC TOUR**. When motion is detected within a frame, the HDZ Series Dome Camera will execute the specific trigger action that has been assigned.

Note After the user has selected the mode as one of **PRESET**, **PRESET TOUR**, **AUTOPAN** and **MIMIC TOUR**, the user will need to specify the specific Preset, Preset Tour, Autopan or Mimic Tour number to execute when triggered.

DWELL TIME

The **DWELL TIME** is the duration a triggered action will execute. If **PRESET** mode is selected, when motion is detected, the HDZ Series Camera will go to the selected Preset position and stay there for a user-defined **DWELL TIME** (**1**～**127** seconds/**Always**) or until alarm condition is released or users rotate the joystick to change the status of the Analogue PTZ Dome.

If other modes are selected (PRESET TOUR/AUTOPAN/MIMIC TOUR), the HDZ Series Camera will keep executing the selected mode (**DWELL TIME** is set to **ALWAYS** and cannot be changed) until the alarm condition is released or users rotate the joystick to change the status of the HDZ Series Camera.

EXIT

Exit the FRAME setting page and go back to the ALARM DETECT main page (see *Figure 4-26*).

Disabling a Frame

Select a frame to be canceled, and press **IRIS+**. The selected frame will then be removed from the monitored field.

Setting the Threshold

The Threshold range is adjustable from 1 to 255. The smaller the threshold value, the more sensitive the motion detection threshold is (1 is the highest sensitivity; at 255 the motion detection will not function).

Exiting the Alarm Detect Menu

Exit the ALARM DETECT menu and go back to the MAIN PAGE 3 to carry on setting up the other camera options.

Setting the WDR Function

The Wide Dynamic Range (WDR) function is especially effective in solving indoor and outdoor image contrast issues in order to enhance better image quality and video displayed. WDR enables the dome to catch detailed data from the dark part of an image (Indoor) without any saturation from the bright part of an image (Outdoor).

Note See *Recommended WDR and DNR Settings By Scene Type on page 94* for more information on the best scenes for enabling/disabling the WDR function.

Enabling WDR

Activate the WDR function by selecting **ON** for this option. In this mode, the HDZ Series Analogue PTZ Dome will operate the WDR function automatically.

Disabling WDR

Deactivate the WDR function by selecting this **OFF** for this option.

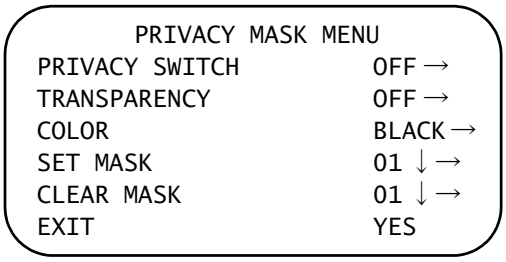
Setting Up Privacy Masks

The Privacy Mask function aims to block any intrusive monitoring. Users can adjust the camera view position by moving the camera with the joystick, and adjust the mask size and area with the direction keys on the control keyboard. When setting a mask, it is suggested to set it at least twice as big (height and width) than the object you want to be masked. The HDZ Series Camera will assume the center of the selected view area as a starting point, and the joystick will be locked as users enter the SET MASK menu (see *Setting Up the Mask on page 82*). Refer to the following sections for setting privacy masks.

Note The Image Flip function and the Image Inverse function will be disabled automatically while the Privacy Mask function is enabled.

The available area for setting a privacy mask is restricted within a tilt angle of 70 degrees. A maximum of 20 masks can be displayed in one scene. All the settings are described in the following sections.

Figure 4-28 Privacy Mask Menu



Enabling Privacy Masks

Users can enable or disable the Privacy Mask function with the **PRIVACY SWITCH** item (see *Figure 4-28*). Set this item to **ON** before configuring the mask zones.

Setting the Privacy Mask Transparency

The color of privacy masks can be set as transparent. Select **ON** in this field to display transparent privacy masks (see *Figure 4-28*). This setting is **OFF** by default.

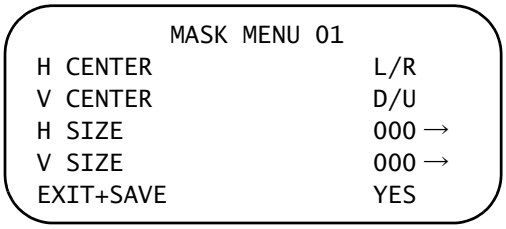
Setting the Privacy Mask Color

The color of privacy mask can be set through the **COLOR** field (see *Figure 4-28*). The available colors are black, white, red, green, blue, cyan, yellow, magenta, and mosaic 1-3.

Setting Up the Mask

Use the control device to move the HDZ Series Camera to the area where you want to set a mask and return to the OSD menu. Select the mask number and press **IRIS+** to enter the **SET MASK** menu (see *Figure 4-29*). The HDZ Series Analogue PTZ Dome will memorize the present position as a privacy mask position.

Figure 4-29 Set Mask Menu



H CENTER

The original horizontal center of a mask zone is the center of the screen. Users are able to move a mask zone to another position by adjusting the horizontal value with the joystick or LEFT/RIGHT keys on the keyboard. The camera will pan right or left according to user's control.

V CENTER

The original vertical center of a mask zone is the center of the screen. Users are able to move a mask zone to another position by adjusting the vertical value with the joystick or LEFT/RIGHT keys on the keyboard. The camera will tilt up or down according to user's control.

H SIZE (00~80)

Users can adjust the horizontal size of a privacy mask through the **H SIZE** setting. Setting the H and V size to 0 can also delete the selected mask.

V SIZE (00~60)

Users can adjust the vertical size of a privacy mask through the **V SIZE** setting. Setting the H and V size to 0 can also delete the selected mask.

Exiting the Mask Menu

Exit the Mask Menu and go back to the Privacy Mask menu to continue setting the privacy mask options.

Clearing a Mask

Users can delete a preset mask zone with this option. Please follow the steps below:

1. Select the mask zone that will be erased (**01**, for example).
2. Press **IRIS+** to confirm the selection.

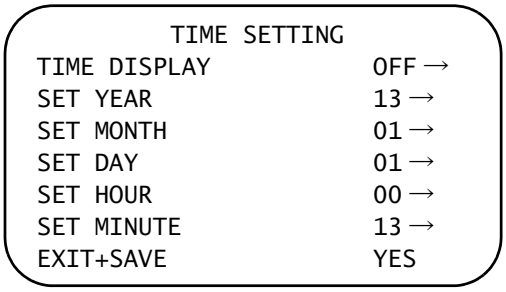
Exiting the Privacy Mask Menu

Exit the PRIVACY MASK menu and go back to the MAIN PAGE 3 to carry on setting up other camera settings.

Setting Up the Time

The time setting menu (see *Figure 4-30*) is used to set the time related options for the HDZ Series Analogue PTZ dome. See the following sections for more information on each of the time related options.

Figure 4-30 Time Setting Menu



Enabling the Time Display

Set the **TIME DISPLAY** to **ON** to display the time and date information on the video screen. Select **OFF** to disable the **TIME DISPLAY** option.

Setting the Year / Month / Day

Use the **SET YEAR** / **MONTH** / **DAY** fields to set the system date. Use the joystick or direction keys to select the year/month/day for the camera.

Setting the Hour / Minute

Use the **SET HOUR** / **MINUTE** fields to set the system time. Use the joystick or direction keys to select the hour/minute for the camera.

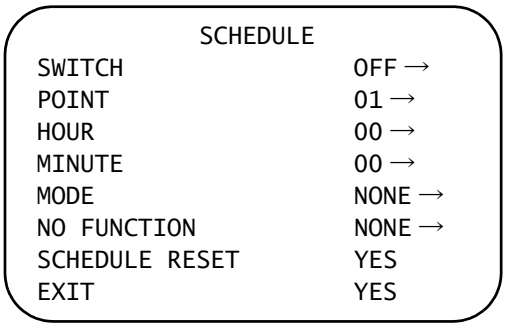
Exiting the Time Setting Menu

Exit the TIME SETTING menu and go back to the MAIN PAGE 3 to carry on setting up other camera options.

Setting Up Schedules

The schedule function (see *Figure 4-31*) allows users to program a preset point or function (Preset Tour, Autopan or Mimic Tour) to automatically perform at a specific time period.

Figure 4-31 Schedule Menu



Enabling/Disabling Schedules

Select **ON** to enable or **OFF** to disable the schedule function.

Setting Schedule Points

Users are allowed to arrange 32 sets of schedule points. Each point that is set for a schedule can be assigned one kind of schedule modes.

Setting the Hour / Minute of a Schedule Point

The **HOUR** and **MINUTE** fields are used for setting up the time to execute each schedule point.

Setting the Mode of a Schedule Point

The **MODE** field is used for setting the schedule function of the selected schedule point. The mode options available are Preset, Preset Tour, Autopan, Mimic Tour, IR Function, and None. See the following sections for more information.

NONE

If selected, no action will be executed for the schedule point.

PRESET

Users can select **PRESET** mode to assign a preset to the schedule point. A preset number must also be selected when this mode is selected. The preset point must be previously configured to be available to select (see *Setting Up a Preset Position on page 65*).

PRESET TOUR

Users can select **PRESET TOUR** mode to assign a preset tour to the schedule point. A preset tour number must also be selected when this mode is selected. The preset tour must be previously configured to be available to select (see *Setting Up a Preset Tour on page 67*).

AUTOPAN

Users can select **AUTOPAN** mode to assign an autopan path to the schedule point. A autopan number must also be selected when this mode is selected. The autopan path must be previously configured to be available to select (see *Setting Up an Autopan Path on page 69*).

MIMIC TOUR

Users can select **MIMIC TOUR** mode to assign a mimic tour to the schedule point. A mimic tour number must also be selected when this mode is selected. The mimic tour must be previously configured to be available to select (see *Setting Up a Mimic Tour on page 71*).

IR FUNC. (IR Function)

If a user selects the IR function mode, the AUTO IR FUNCTION will be activated for the selected schedule point.

Reseting a Schedule

Users can reset the whole schedule by selecting this field.

Exiting the Schedule Menu

Exit the SCHEDULE menu and go back to the MAIN PAGE 3 to continue configuring camera settings.

Exiting the On-Screen Display

To exit the OSD setup menu, users can either select the **EXIT OSD** item on the bottom of **MAIN PAGE 3** and press IRIS+. Alternatively, you can press the **IRIS-** key on the control keyboard from any position on MAIN PAGE 1, 2 or 3 to exit the OSD setup menu.

A

HDZ Camera Specifications

Table A-1 HDZ30A(X) Series Camera Specifications

Specification	Description
Camera Specifications	
Scanning System	NTSC / PAL
Image Sensor	1/4" Sony 960H CCD
Optical Zoom	30x
Digital Zoom	1–12x variable
Effective Pixels	NTSC: 480K; PAL: 570K
Horizontal Resolution	650 TVL
Video Output	1.0 Vp-p @ 75 ohms (BNC)
S/N Ratio	>50 dB (AGC Off)
Minimum Illumination	0.08 lux (color) / 0.005 lux (Black/White) @ F1.6, 30 IRE
Focal Length	0.13 in. to 4.0 in. (3.4 mm to 102.0 mm)
Focus Mode	Auto (Continuous/PTZ Trigger/Zoom Trigger focus) / Manual
White Balance	Auto / Indoor / Outdoor / ATW / Manual
Iris Control	Auto / Manual
Electronic Shutter	1/1 ~ 1/10,000 sec
AGC Control	Auto / Manual
Backlight Compensation	On / Off
Operation Specifications	
Multi-Language GUI	English, French, German, Italian, Japanese, Polish, Portuguese, Russian, Spanish, Turkish, Dutch, Czech, S. Chinese, T. Chinese
Pan Travel	360° endless
Tilt Travel	-10° to 190°
Manual Speed	0.5° to 200°/s
Presets	256
Preset Accuracy	0.225°

Table A-1 HDZ30A(X) Series Camera Specifications (cont'd)

Specification	Description
Operation Specifications (cont'd)	
Preset Speed	5° to 400°/s
Preset Tour	16 tours with up to 32 presets per tour
Auto Pan	4
Mimic Tour	16 tours with up to 100 seconds per tour
Privacy Mask	20 (without motion detection window) 16 (with motion detection window)
Proportional Pan & Tilt	On / Off (Pan and tilt speed proportional to zoom ratio)
Resume after Power Loss	Yes
Home Function	Preset, Preset Tour, Auto Pan, Mimic Tour
Auto Flip	Digital / Mechanical / Off
Digital Slow Shutter	On / Off
Motion Detection	On / Off
Wide Dynamic Range	On / Off
Day / Night: IR Cut Filter	On / Off
Image Freeze	On / Off
Image Inverse	On / Off
Noise Reduction (2D)	On / Off
Noise Reduction (3D)	Off / 1–5
Electronic Image Stabilizer	On / Off
Built-in Protocol	Maxpro Mode (Diamond), Pelco P, Pelco D, VCL
Zone Title	16 independent zones
Alarm In	4 sets / 5 V, 10,000 ohms pull up
Alarm Out	2 sets / Relay output, max: 2 A @ 30 V DC / 0.5 A @ 125 V AC
Alarm Reaction	Preset, Preset Tour, Auto Pan, Mimic Tour
General Specifications	
Environment	Indoor
Dimension	Indoor: ø 7.5" x 10.8" (ø 191.5 mm x 275.1 mm)
Weight	4.85 lb (2.2 kg) With in-ceiling bracket: 6.83 lb (3.1 kg)
Operating Temperature	32°F to 122°F (0°C to 50°C)[a]
Relative Humidity	10% to 90%, non-condensing
Power Source	24 V AC ± 10%
Power Consumption	20 W

Table A-1 HDZ30A(X) Series Camera Specifications (cont'd)

Specification	Description
Regulatory	
Emissions	EN55022, FCC Part 15B
Immunity	EN50130-4
Safety	NA: UL/CSA 60950-1 EU: EN60950-1
RoHS	EN50581

[a] Protecting the dome from direct sunlight in high temperature environments is advised.

Table A-2 HDZ36AE(X) Series Camera Specifications

Specification	Description
Camera Specifications	
Scanning System	NTSC / PAL
Image Sensor	1/4" Sony 960H CCD
Optical Zoom	36x
Digital Zoom	1–12x variable
Effective Pixels	NTSC: 480K; PAL: 570K
Horizontal Resolution	650 TVL
Video Output	1.0 Vp-p @ 75 ohms (BNC)
S/N Ratio	>50 dB (AGC Off)
Minimum Illumination	0.08 lux (color) / 0.005 lux (Black/White) @ F1.6, 30 IRE
Focal Length	0.13 in. to 4.8 in. (3.4 mm to 122.4 mm)
Focus Mode	Auto (Continuous/PTZ Trigger/Zoom Trigger focus) / Manual
White Balance	Auto / Indoor / Outdoor / ATW / Manual
Iris Control	Auto / Manual
Electronic Shutter	1/1 ~ 1/10,000 sec
AGC Control	Auto / Manual
Backlight Compensation	On / Off
Operation Specifications	
Multi-Language GUI	English, French, German, Italian, Japanese, Polish, Portuguese, Russian, Spanish, Turkish, Dutch, Czech, S. Chinese, T. Chinese
Pan Travel	360° endless
Tilt Travel	-10° to 190°
Manual Speed	0.5° to 200°/s

Table A-2 HDZ36AE(X) Series Camera Specifications (cont'd)

Specification	Description
Operation Specifications (cont'd)	
Presets	256
Preset Accuracy	0.225°
Preset Speed	5° to 400°/s
Preset Tour	16 tours with up to 32 presets per tour
Auto Pan	4
Mimic Tour	16 tours with up to 100 seconds per tour
Privacy Mask	20 (without motion detection window) 16 (with motion detection window)
Proportional Pan & Tilt	On / Off (Pan and tilt speed proportional to zoom ratio)
Resume after Power Loss	Yes
Home Function	Preset, Preset Tour, Auto Pan, Mimic Tour
Auto Flip	Digital / Mechanical / Off
Digital Slow Shutter	On / Off
Motion Detection	On / Off
Wide Dynamic Range	On / Off
Day / Night: IR Cut Filter	On / Off
Image Freeze	On / Off
Image Inverse	On / Off
Noise Reduction (2D)	On / Off
Noise Reduction (3D)	Off / 1–5
Electronic Image Stabilizer	On / Off
Built-in Protocol	Maxpro Mode (Diamond), Pelco P, Pelco D, VCL
Zone Title	16
Alarm In	4 sets / 5 V, 10,000 ohms pull up
Alarm Out	2 sets / Relay output, max: 2 A @ 30 V DC / 0.5 A @ 125 V AC
Alarm Reaction	Preset, Preset Tour, Auto Pan, Mimic Tour
General Specifications	
Environment	Outdoor
Dimension	Outdoor (with sunshield): ø 7.5" x 10.7" (ø 191.5 mm x 270.5 mm)
Weight	5.73 lb (2.6 kg), with sunshield
Operating Temperature	–40°F to 122°F (–40°C to 50°C)[a]
Relative Humidity	10% to 90%, non-condensing
Waterproof Standard	IP66 standard and NEMA 4X (HDZ Outdoor)

Table A-2 HDZ36AE(X) Series Camera Specifications (cont'd)

Specification	Description
General Specifications (con't)	
Power Source	24 V AC ± 10%
Power Consumption	50 W (with Heater)
Regulatory	
Emissions	CE EN55022, FCC Part 15B
Immunity	CE EN50130-4
Safety	NA: UL/CSA 60950-1, UL/CSA 60950-22 EU: EN60950-1, EN60950-22
RoHS	EN50581

[a] Protecting the dome from direct sunlight in high temperature environments is advised.

B

Troubleshooting

This appendix offers possible solutions to some common issues that can occur when installing or configuring the Analogue PTZ Dome.

Technical Support

Prior to calling Honeywell technical support, refer to the following topics for possible solutions to problems with your HDZ Series Analogue PTZ Dome. To contact the Honeywell Video Systems technical support team, call 1-800-323-4576 (North America only) or fill out the form at *https://www.honeywellsystems.com/ss/techsupp/index.html* to get a response from technical support.

Any equipment returned to Honeywell Video Systems for warranty or service repair must have a Return Merchandise Authorization (RMA) number. The RMA number must be clearly marked on all return packages and internal paperwork.

Problem: Lens Out of Optical Focus

Possible solutions:

1. Verify that the lens cap has been removed from the camera.
2. This can also be caused by dirt, oil, grease, and fingerprints, and so on, that have accumulated on the lens or bubble. Check the lens and dome bubble, then clean them, if needed.

CAUTION **Use extreme caution when cleaning the lens and dome bubble so you do not scratch their optical surfaces. Prepare a washed-out cotton cloth or lens cleaning paper with alcohol or lens cleaning liquid. Clean by moving spirally from the lens center towards its rim. Repeat until the lens is completely clean.**

Problem: Communication Between Dome and Keyboard

To control the PTZ dome, users will need to connect the dome to a keyboard/controller (such as Honeywell's HJC4000). If you are having problems with the communication between the dome and controller, check the following:

1. Verify that the RS485 connection is made correctly between dome and controller (see *Connecting RS485 on page 28* for more information).
2. Check that both the HDZ PTZ dome and keyboard/controller have been set to the same communication protocol, baud rate, and parity. See *Camera Control Protocol Setting on page 27* for more information.
3. Check that both the HDZ PTZ dome and keyboard controller have been set for the same ID setting which gives the camera/dome a number that can then be identified by the connected keyboard/controller. See *ID Setting on page 26* for more information on setting the ID for the PTZ dome.

Note RS485 connection and setting of communication protocol/baud rate/parity will vary depending on what keyboard controller is used. See the documentation included with your keyboard controller for more information on PTZ setup.

Recommended WDR and DNR Settings By Scene Type

Depending on the type of scene the HDZ Series Analogue PTZ Dome is viewing, certain WDR and DNR settings will be more effective than others. Refer to *Table B-1* below for recommended WDR and DNR settings, depending on the type of scene.

Table B-1 Recommended WDR and DNR Settings by Scene Type

Type of Scene	Day/Night Mode	Analogue HDZ Setting			Remark
		2D NR	3D NR	WDR	
(Default Settings)	*Color, B/W*	*On*	*Off*	*On*	
Indoor daylight/normal lighting. Camera is NOT facing windows or open doors.	Color	On	Level 1	On	Turn off 3D NR if a trail is visible behind moving objects.
Indoor daylight/normal lighting. Camera IS facing windows or open doors.	Color	On	Level 1	On	Turn off 3D NR if a trail is visible behind moving objects.
Indoor lowlight	Color, B/W	On	Off	On	(Default setting)
Outdoor daylight	Color	On	Level 1	On	Turn off 3D NR if a trail is visible behind moving objects.

Table B-1 Recommended WDR and DNR Settings by Scene Type (cont'd)

Type of Scene	Day/Night Mode	Analogue HDZ Setting			Remark
		2D NR	3D NR	WDR	
Outdoor night time, with street lighting	Color, B/W	On	Off	On	(Default setting)
Outdoor night time, with dim lighting	B/W	On	Off	Off	Turn on 3D NR for better static object identification in darkness, but a trail might be seen behind moving objects.
Outdoor night time, reading car license plates	B/W	On	Off	On	(Default setting). WDR can keep the view clear between bright car headlights

C

ID Settings

This appendix covers all of the possible ID settings that can be set for the HDZ Series Analogue PTZ Dome (see *Table C-1*).

Table C-1 ID Switch Settings

ID No.	Switch Setting									
	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10
0	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
1	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
2	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
3	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
4	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
5	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
6	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
7	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
8	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
9	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
10	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
11	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
12	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
13	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
14	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
15	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
16	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
17	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
18	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
19	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
20	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
21	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
22	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
23	ON	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
24	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF
25	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF
26	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF

Table C-1 ID Switch Settings (cont'd)

ID No.	Switch Setting									
	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10
27	ON	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF
28	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
29	ON	OFF	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
30	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
31	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
32	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
33	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
34	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
35	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
36	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
37	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
38	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
39	ON	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
40	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
41	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
42	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
43	ON	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
44	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
45	ON	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
46	OFF	ON	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
47	ON	ON	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
48	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
49	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
50	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
51	ON	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
52	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	OFF
53	ON	OFF	ON	OFF	ON	ON	OFF	OFF	OFF	OFF
54	OFF	ON	ON	OFF	ON	ON	OFF	OFF	OFF	OFF
55	ON	ON	ON	OFF	ON	ON	OFF	OFF	OFF	OFF
56	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
57	ON	OFF	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
58	OFF	ON	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
59	ON	ON	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
60	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF
61	ON	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF
62	OFF	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF
63	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF
64	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
65	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF

Table C-1 ID Switch Settings (cont'd)

ID No.	Switch Setting									
	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10
66	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
67	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
68	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
69	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
70	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
71	ON	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
72	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
73	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
74	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
75	ON	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
76	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	OFF
77	ON	OFF	ON	ON	OFF	OFF	ON	OFF	OFF	OFF
78	OFF	ON	ON	ON	OFF	OFF	ON	OFF	OFF	OFF
79	ON	ON	ON	ON	OFF	OFF	ON	OFF	OFF	OFF
80	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
81	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
82	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
83	ON	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
84	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	OFF
85	ON	OFF	ON	OFF	ON	OFF	ON	OFF	OFF	OFF
86	OFF	ON	ON	OFF	ON	OFF	ON	OFF	OFF	OFF
87	ON	ON	ON	OFF	ON	OFF	ON	OFF	OFF	OFF
88	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
89	ON	OFF	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
90	OFF	ON	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
91	ON	ON	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
92	OFF	OFF	ON	ON	ON	OFF	ON	OFF	OFF	OFF
93	ON	OFF	ON	ON	ON	OFF	ON	OFF	OFF	OFF
94	OFF	ON	ON	ON	ON	OFF	ON	OFF	OFF	OFF
95	ON	ON	ON	ON	ON	OFF	ON	OFF	OFF	OFF
96	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
97	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
98	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
99	ON	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
100	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
101	ON	OFF	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
102	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
103	ON	ON	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
104	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	OFF

Table C-1 ID Switch Settings (cont'd)

ID No.	Switch Setting									
	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10
105	ON	OFF	OFF	ON	OFF	ON	ON	OFF	OFF	OFF
106	OFF	ON	OFF	ON	OFF	ON	ON	OFF	OFF	OFF
107	ON	ON	OFF	ON	OFF	ON	ON	OFF	OFF	OFF
108	OFF	OFF	ON	ON	OFF	ON	ON	OFF	OFF	OFF
109	ON	OFF	ON	ON	OFF	ON	ON	OFF	OFF	OFF
110	OFF	ON	ON	ON	OFF	ON	ON	OFF	OFF	OFF
111	ON	ON	ON	ON	OFF	ON	ON	OFF	OFF	OFF
112	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
113	ON	OFF	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
114	OFF	ON	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
115	ON	ON	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
116	OFF	OFF	ON	OFF	ON	ON	ON	OFF	OFF	OFF
117	ON	OFF	ON	OFF	ON	ON	ON	OFF	OFF	OFF
118	OFF	ON	ON	OFF	ON	ON	ON	OFF	OFF	OFF
119	ON	ON	ON	OFF	ON	ON	ON	OFF	OFF	OFF
120	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF
121	ON	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF
122	OFF	ON	OFF	ON	ON	ON	ON	OFF	OFF	OFF
123	ON	ON	OFF	ON	ON	ON	ON	OFF	OFF	OFF
124	OFF	OFF	ON	ON	ON	ON	ON	OFF	OFF	OFF
125	ON	OFF	ON	ON	ON	ON	ON	OFF	OFF	OFF
126	OFF	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF
127	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF
128	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
129	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
130	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
131	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
132	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
133	ON	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
134	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
135	ON	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
136	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
137	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
138	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
139	ON	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF
140	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF
141	ON	OFF	ON	ON	OFF	OFF	OFF	ON	OFF	OFF
142	OFF	ON	ON	ON	OFF	OFF	OFF	ON	OFF	OFF
143	ON	ON	ON	ON	OFF	OFF	OFF	ON	OFF	OFF

Table C-1 ID Switch Settings (cont'd)

ID No.	Switch Setting									
	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10
144	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
145	ON	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
146	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
147	ON	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
148	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	OFF
149	ON	OFF	ON	OFF	ON	OFF	OFF	ON	OFF	OFF
150	OFF	ON	ON	OFF	ON	OFF	OFF	ON	OFF	OFF
151	ON	ON	ON	OFF	ON	OFF	OFF	ON	OFF	OFF
152	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
153	ON	OFF	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
154	OFF	ON	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
155	ON	ON	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
156	OFF	OFF	ON	ON	ON	OFF	OFF	ON	OFF	OFF
157	ON	OFF	ON	ON	ON	OFF	OFF	ON	OFF	OFF
158	OFF	ON	ON	ON	ON	OFF	OFF	ON	OFF	OFF
159	ON	ON	ON	ON	ON	OFF	OFF	ON	OFF	OFF
160	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF
161	ON	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF
162	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF
163	ON	ON	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF
164	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	OFF
165	ON	OFF	ON	OFF	OFF	ON	OFF	ON	OFF	OFF
166	OFF	ON	ON	OFF	OFF	ON	OFF	ON	OFF	OFF
167	ON	ON	ON	OFF	OFF	ON	OFF	ON	OFF	OFF
168	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
169	ON	OFF	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
170	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
171	ON	ON	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
172	OFF	OFF	ON	ON	OFF	ON	OFF	ON	OFF	OFF
173	ON	OFF	ON	ON	OFF	ON	OFF	ON	OFF	OFF
174	OFF	ON	ON	ON	OFF	ON	OFF	ON	OFF	OFF
175	ON	ON	ON	ON	OFF	ON	OFF	ON	OFF	OFF
176	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	OFF
177	ON	OFF	OFF	OFF	ON	ON	OFF	ON	OFF	OFF
178	OFF	ON	OFF	OFF	ON	ON	OFF	ON	OFF	OFF
179	ON	ON	OFF	OFF	ON	ON	OFF	ON	OFF	OFF
180	OFF	OFF	ON	OFF	ON	ON	OFF	ON	OFF	OFF
181	ON	OFF	ON	OFF	ON	ON	OFF	ON	OFF	OFF
182	OFF	ON	ON	OFF	ON	ON	OFF	ON	OFF	OFF

Table C-1 ID Switch Settings (cont'd)

ID No.	Switch Setting									
	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10
183	ON	ON	ON	OFF	ON	ON	OFF	ON	OFF	OFF
184	OFF	OFF	OFF	ON	ON	ON	OFF	ON	OFF	OFF
185	ON	OFF	OFF	ON	ON	ON	OFF	ON	OFF	OFF
186	OFF	ON	OFF	ON	ON	ON	OFF	ON	OFF	OFF
187	ON	ON	OFF	ON	ON	ON	OFF	ON	OFF	OFF
188	OFF	OFF	ON	ON	ON	ON	OFF	ON	OFF	OFF
189	ON	OFF	ON	ON	ON	ON	OFF	ON	OFF	OFF
190	OFF	ON	ON	ON	ON	ON	OFF	ON	OFF	OFF
191	ON	ON	ON	ON	ON	ON	OFF	ON	OFF	OFF
192	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
193	ON	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
194	OFF	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
195	ON	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
196	OFF	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	OFF
197	ON	OFF	ON	OFF	OFF	OFF	ON	ON	OFF	OFF
198	OFF	ON	ON	OFF	OFF	OFF	ON	ON	OFF	OFF
199	ON	ON	ON	OFF	OFF	OFF	ON	ON	OFF	OFF
200	OFF	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	OFF
201	ON	OFF	OFF	ON	OFF	OFF	ON	ON	OFF	OFF
202	OFF	ON	OFF	ON	OFF	OFF	ON	ON	OFF	OFF
203	ON	ON	OFF	ON	OFF	OFF	ON	ON	OFF	OFF
204	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF
205	ON	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF
206	OFF	ON	ON	ON	OFF	OFF	ON	ON	OFF	OFF
207	ON	ON	ON	ON	OFF	OFF	ON	ON	OFF	OFF
208	OFF	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	OFF
209	ON	OFF	OFF	OFF	ON	OFF	ON	ON	OFF	OFF
210	OFF	ON	OFF	OFF	ON	OFF	ON	ON	OFF	OFF
211	ON	ON	OFF	OFF	ON	OFF	ON	ON	OFF	OFF
212	OFF	OFF	ON	OFF	ON	OFF	ON	ON	OFF	OFF
213	ON	OFF	ON	OFF	ON	OFF	ON	ON	OFF	OFF
214	OFF	ON	ON	OFF	ON	OFF	ON	ON	OFF	OFF
215	ON	ON	ON	OFF	ON	OFF	ON	ON	OFF	OFF
216	OFF	OFF	OFF	ON	ON	OFF	ON	ON	OFF	OFF
217	ON	OFF	OFF	ON	ON	OFF	ON	ON	OFF	OFF
218	OFF	ON	OFF	ON	ON	OFF	ON	ON	OFF	OFF
219	ON	ON	OFF	ON	ON	OFF	ON	ON	OFF	OFF
220	OFF	OFF	ON	ON	ON	OFF	ON	ON	OFF	OFF
221	ON	OFF	ON	ON	ON	OFF	ON	ON	OFF	OFF

Table C-1 ID Switch Settings (cont'd)

ID No.	Switch Setting									
	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10
222	OFF	ON	ON	ON	ON	OFF	ON	ON	OFF	OFF
223	ON	ON	ON	ON	ON	OFF	ON	ON	OFF	OFF
224	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
225	ON	OFF	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
226	OFF	ON	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
227	ON	ON	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
228	OFF	OFF	ON	OFF	OFF	ON	ON	ON	OFF	OFF
229	ON	OFF	ON	OFF	OFF	ON	ON	ON	OFF	OFF
230	OFF	ON	ON	OFF	OFF	ON	ON	ON	OFF	OFF
231	ON	ON	ON	OFF	OFF	ON	ON	ON	OFF	OFF
232	OFF	OFF	OFF	ON	OFF	ON	ON	ON	OFF	OFF
233	ON	OFF	OFF	ON	OFF	ON	ON	ON	OFF	OFF
234	OFF	ON	OFF	ON	OFF	ON	ON	ON	OFF	OFF
235	ON	ON	OFF	ON	OFF	ON	ON	ON	OFF	OFF
236	OFF	OFF	ON	ON	OFF	ON	ON	ON	OFF	OFF
237	ON	OFF	ON	ON	OFF	ON	ON	ON	OFF	OFF
238	OFF	ON	ON	ON	OFF	ON	ON	ON	OFF	OFF
239	ON	ON	ON	ON	OFF	ON	ON	ON	OFF	OFF
240	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF
241	ON	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF
242	OFF	ON	OFF	OFF	ON	ON	ON	ON	OFF	OFF
243	ON	ON	OFF	OFF	ON	ON	ON	ON	OFF	OFF
244	OFF	OFF	ON	OFF	ON	ON	ON	ON	OFF	OFF
245	ON	OFF	ON	OFF	ON	ON	ON	ON	OFF	OFF
246	OFF	ON	ON	OFF	ON	ON	ON	ON	OFF	OFF
247	ON	ON	ON	OFF	ON	ON	ON	ON	OFF	OFF
248	OFF	OFF	OFF	ON	ON	ON	ON	ON	OFF	OFF
249	ON	OFF	OFF	ON	ON	ON	ON	ON	OFF	OFF
250	OFF	ON	OFF	ON	ON	ON	ON	ON	OFF	OFF
251	ON	ON	OFF	ON	ON	ON	ON	ON	OFF	OFF
252	OFF	OFF	ON	ON	ON	ON	ON	ON	OFF	OFF
253	ON	OFF	ON	ON	ON	ON	ON	ON	OFF	OFF
254	OFF	ON	ON	ON	ON	ON	ON	ON	OFF	OFF
255	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF

D

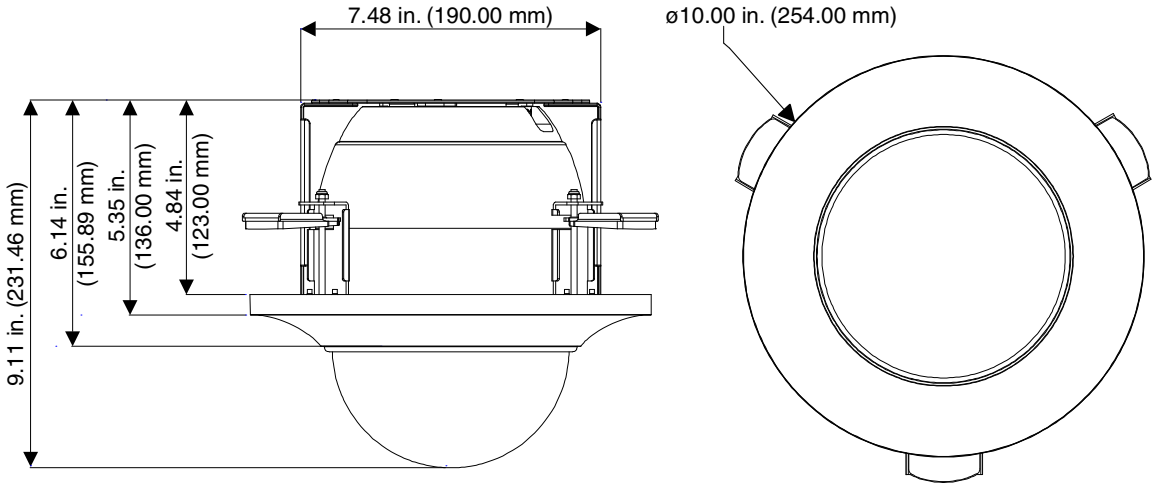
In-Ceiling Bracket Installation

This document describes how to install an HDZ Series camera in a suspended ceiling using the HDZINBKT in-ceiling bracket.

CAUTION **Installation and servicing should be performed only by qualified and experienced technicians to conform to all local codes and to maintain your warranty.**

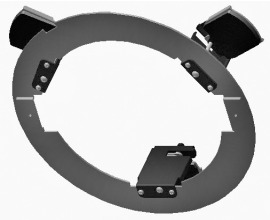
CAUTION **Ensure that the installation area can safely support the weight of the camera.**

Figure D-1 In-Ceiling Bracket Dimensions

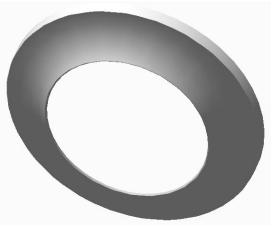


Package Contents

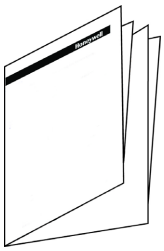
Bracket Frame



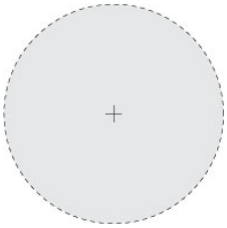
Ceiling Support Ring



Trim Ring



Quick Installation Guide



Ceiling Template

Recommended

Ceiling Support Plate, Honeywell Part Number **517082-7130** (not supplied)

Installing the In-Ceiling Bracket

It is recommended that you use a ceiling support plate (Honeywell part number 517082-7130) when installing the HDZINBKT in-ceiling bracket in a suspended ceiling.

Step 1: Cut a hole in the ceiling

1. Select the location where you want to install the camera. The installation area must be able to safely support the weight of the camera.

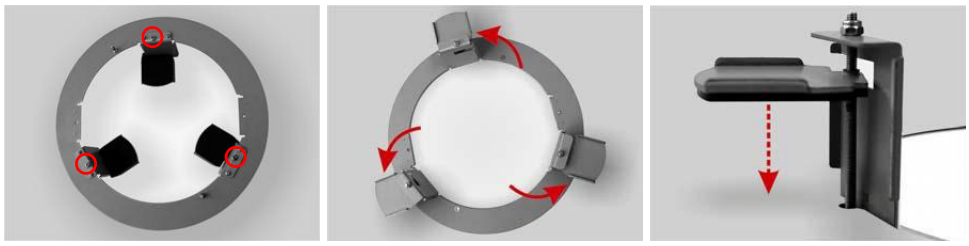
2. Do one of the following:

Installation with Ceiling Support Plate	Installation without Ceiling Support Plate
a. Remove the ceiling tile at the selected location and fit the ceiling tile inside the ceiling support plate. If necessary, trim the edges of the tile so that it fits snugly inside the support plate. b. Cut a hole in the ceiling tile 197 mm (7.75 in.) in diameter matching the opening in the ceiling support plate. c. Replace the ceiling tile (with ceiling support plate attached) in the ceiling.	Place the supplied ceiling template on the ceiling at the selected location and cut around the template.

3. Attach a safety cable (not supplied) to a grid support or other structural support in the ceiling.

Step 2: Install the ceiling support ring

1. Insert the ceiling support ring (with wing tabs turned inward) into the opening in the ceiling.
2. Turn the wing tabs outward, and then tighten the three M4×70 screws located on the underside of the ceiling support ring to lower the wing tabs against the ceiling tile.



A B C

3. Continue tightening the screws until the ceiling support ring is tight against the ceiling.

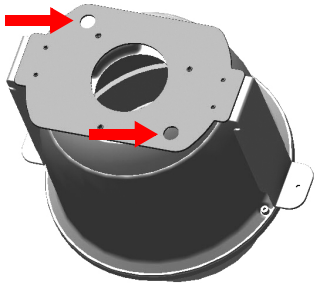
Step 3: Attach the camera to bracket frame

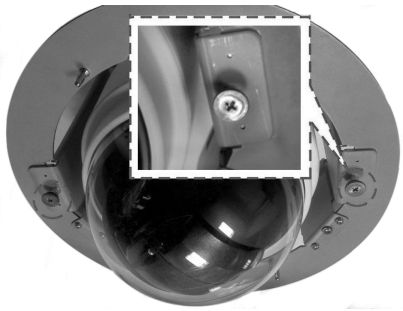
1. Place the camera against the base of the bracket frame and twist it clockwise until it locks in place.

2. Tighten the pre-installed Torx screw on the camera housing to secure the camera to the bracket frame.

Step 4: Install the camera and bracket assembly

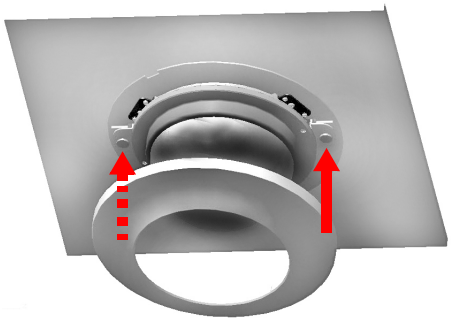
1. Pull the loose end of the safety cable through the opening in the ceiling and attach it to one of the eyelets on the bracket frame.
2. Pull the camera cable(s) through the opening in the ceiling and connect the cable(s) to the camera.
3. Insert the camera and bracket assembly into the opening in the ceiling and attach the camera and bracket assembly to the ceiling support ring using the two supplied thumb screws. Use a Phillips driver to tighten the screws.





Step 5: Attach the trim ring

Attach the trim ring to the ceiling support ring by lining up the two magnets on the trim ring with the two thumb screws on the ceiling support ring.



Note No screws are needed to attach the trim ring.

Index

A

alarm output *29*
alarm settings *75*
angle adjuster *60*
aperture *58*
auto calibration *61*
auto exposure *53*
auto focus *52*
autopan *69*

B

backlight compensation *52*

C

cables
- alarm *29*
- connections *25*

camera specifications *87*
cautions *3*
ceiling mount *32*
configuring
- alarm settings *75*
- angle adjuster *60*
- aperture *58*
- auto calibration *61*
- auto exposure *53*
- autopan *69*
- backlight compensation *52*
- default camera *52*
- digital noise reduction *57*
- digital zoom *56*
- focus mode *52*
- freeze *58*
- home setting *72*
- ID display *64*
- image flip *59*
- image inverse *57*
- image stabilizer *58*
- IR function *74*
- language *52*
- mimic tour function *71*
- motion detect function *78*
- password *61*
- preset point *65*
- preset tour *67*
- privacy masks *81*
- PT position *60*
- schedules *83*
- slow shutter *57*
- speed by zoom *61*
- system reset *63*
- time settings *83*
- WBC mode *54*
- WDR function *80*
- zone title *64*
- zoom speed *56*

connections *25*
connectors
- alarm *29*
- power *29*
- RS485 *28*
- video *28*

D

default camera *52*
digital noise reduction *57*
digital zoom *56*
dimensions *18*
dip switches *25*

E

eyelet *31*

F

firmware, upgrading *49*
flat roof mount *34*
focus mode *52*
freeze *58*

H

HDZ camera
- assembling *23*
- connections *25*

dimensions *18*
features *17*
mounting *30*
parts list *21*
specifications *87*
home setting *72*

I

ID display *64*
image flip *59*
image inverse *57*
image stabilizer *58*
in-ceiling bracket *105*
IR function *74*

K

keyboard
basic controls *48*
sending to preset *48*
special presets *48*

L

language selection *52*
lanyard *31*

M

main menu page 1 *51*
main menu page 2 *63*
main menu page 3 *74*
menu of settings *42*
mimic tour *71*
motion detect *78*
mounting
ceiling mount *32*
flat roof mount *34*
in-ceiling bracket *105*
overview *30*
parapet mount *34*
wall mount *33*

N

navigating the OSD menu *37*

O

OSD
alarm setup *75*
angle adjuster setup *60*
aperture setup *58*
auto calibration setup *61*
auto close setup *63*
auto exposure setup *53*
autopan setup *69*
backlight compensation setup *52*
basic controls *37*
default camera setup *52*
digital zoom setup *56*
DNR setup *57*
exiting *85*
focus mode setup *52*
freeze setup *58*
home setup *72*
ID display setup *64*
image flip setup *59*
image inverse setup *57*
image stabilizer setup *58*
IR function setup *74*
language setup *52*
main menu page 3 *74*
menu *42*
mimic tour setup *71*
motion detect setup *78*
navigating *37*
overview *37*
password setup *61*
passwork *36*
preset setup *65*
preset tour setup *67*
privacy masks setup *81*
PT position setup *60*
resetting *63*
schedule setup *83*
slow shutter setup *57*
speed by zoom setup *61*
time setup *83*
title setup *64*
WBC mode setup *54*
WDR setup *80*
zoom speed setup *56*

P

parapet mount *34*
parts list *21*
password *36*, *61*
preset point *65*
preset tour *67*
preset, sending to with keyboard *48*
presets, special keyboard commands *48*
privacy masks *81*
PT position *60*

R

regulatory statements *3*
related documents *16*
resetting system *63*
roof mount *34*

S

safety instructions *4*
schedules *83*
securing camera *31*

setup menu page 1 *56*
setup menu page 2 *59*
slow shutter *57*
special presets *48*
specifications *87*
speed by zoom *61*

T

technical support *93*
time settings *83*
title, zone *64*

U

upgrading firmware *49*

W

wall mount *33*
warnings *3*
warranty *5*
white balance control *54*
wide dynamic range *80*

Z

zoom speed *56*

Honeywell Security Products Americas (Head Office)
2700 Blankenbaker Pkwy, Suite 150
Louisville, KY 40299, USA
www.honeywell.com/security
☏ +1 800 323 4576

Honeywell Security Europe/South Africa
Aston Fields Road, Whitehouse Industrial Estate
Runcorn, WA7 3DL, United Kingdom
www.honeywell.com/security/uk
☏ +44 (0) 1928 754 028

Honeywell Security Products Americas Caribbean/Latin America
9315 NW 112th Ave.
Miami, FL 33178, USA
www.honeywell.com/security/clar
☏ +1 305 805 8188

Honeywell Security Pacific
Level 3, 2 Richardson Place
North Ryde, NSW 2113, Australia
www.asia.security.honeywell.com
☏ +61 2 9353 7000

Honeywell Security Asia
35F Tower A, City Center, 100 Zun Yi Road
Shanghai 200051, China
www.asia.security.honeywell.com
☏ +86 21 2219 6888

Honeywell Security Middle East/N. Africa
Emaar Business Park, Sheikh Zayed Road
Building No. 2, Office No. 301
Post Office Box 232362
Dubai, United Arab Emirates
www.honeywell.com/security/me
☏ +971 (0) 4 454 1719

Honeywell Security Northern Europe
Ampèrestraat 41
1446 TR Purmerend, The Netherlands
www.honeywell.com/security/nl
☏ +31 (0) 299 410 200

Honeywell Security Deutschland
Johannes-Mauthe-Straße 14
D-72458 Albstadt, Germany
www.honeywell.com/security/de
☏ +49 74 31 / 801-18 70

Honeywell Security France
Immeuble Lavoisier
Parc de Haute Technologie
3-7 rue Georges Besse
92160 Antony, France
www.honeywell.com/security/fr
☏ +33 (0) 1 40 96 20 50

Honeywell Security Italia SpA
Via della Resistenza 53/59
20090 Buccinasco
Milan, Italy
www.honeywell.com/security/it
☏ +39 (0) 2 4888 051

Honeywell Security España
Avenida de Italia, n° 7, 2ª planta
C.T. Coslada
28821 Coslada, Madrid, Spain
www.honeywell.com/security/es
☏ +34 902 667 800

Honeywell

www.honeywell.com/security
+1 800 323 4576 (North America only)
https://www.honeywellsystems.com/ss/techsupp/index.html

Document 800-16526 – Rev A – 07/2014

© 2014 Honeywell International Inc. All rights reserved. No part of this publication may be reproduced by any means without written permission from Honeywell. The information in this publication is believed to be accurate in all respects. However, Honeywell cannot assume responsibility for any consequences resulting from the use thereof. The information contained herein is subject to change without notice. Revisions or new editions to this publication may be issued to incorporate such changes.